

BULLETIN No. 36

THE COLORADO MIDLAND RAILROAD

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It is difficult to say which is the more pathetic—a long string of motive power and equipment awaiting an upturn in business conditions or an abandoned right of way silently crumbling to pieces. Both bring back recollections and history—as well as what might have been! As the number of these abandoned railroads in this country increases, it will become more and more difficult to piece together their history and preserve it for the future.

We are glad to welcome to our columns the material so carefully prepared by one of our members—Mr. Carl F. Graves. Mr. Graves has written an excellent paper on the Colorado Midland Railroad. This road, organized in 1883, was the first standard gauge railroad which penetrated the heart of the Rocky Mountains. Like all mountain railroads, its history was eventful and full of trials and tribulations. Finally the end came—August 4th, 1918 with the running of the last train and four years later the company was finally dissolved, its motive power and equipment sold and scattered. The old roadbed is now used as a scenic highway and thus the skill of the old surveyors will be preserved for the future. One may well ponder if the road would have been able to carry on with the unequal competition for traffic caused by the trucks but there is no doubt that the unfair methods employed by the United States Railroad Administration contributed directly to its final end.

During its thirty-five years of existence the road served the communities on its line and served them well—in spite of the elements and other conditions. We are glad to preserve the history of this road in our publications and appreciate the time and research made by our member, Mr. Graves in preparing this paper.

The Pennoyer Colored Prints

To those of our members who have not obtained a set of these colored prints which are reproductions made from the brush of that talented artist and fellow-member—A. Sheldon Pennoyer, we urge you to procure this set while the supply lasts. This set includes "Snow-bound"—A Crampton type of locomotive used in the fifties on the Camden & Amboy R. R.; the "Pioneer", built by Seth Wilmarth in 1851 for the Cumberland Valley R. R.; "An American Express Train", drawn by a Rogers locomotive, built in the seventies; and, through the courtesy of the Delaware & Hudson R. R. we are able to include the "Stourbridge Lion", imported by that road in 1829. The size of the "Pioneer" print is 7x11"—the other three are 8¼x10½". The price is \$5.00 per set. Orders should be addressed to Chas. E. Fisher, 6 Orkney Road, Brookline, Mass.

Cover Design

Again we wish to express our appreciation to our Art Editor, Mr. Otto Kuhler, for favoring us with one of his sketches for our cover. The wintry scene is somewhere on the Colorado Midland R. R. and one can almost hear the "bark" of those locomotives working hard to get the train over the grade. Judging from the snow on the pilot and running board, drifts have been encountered somewhere on the trip and no doubt the sand pipe is busy peddling sand to those low drivers. Mr. Kuhler has caught the spirit of the mountain railroad and again we wish to express our thanks for his cover design.

The Colorado Midland

By CARL F. GRAVES.

THE scene of this brief history of a railroad which enjoyed a most colorful existence is the State of Colorado, and the time embraces that period from its inception in 1883 to the year 1924, when a good share of the then-abandoned roadbed became a part of the State's highway system.

That part of Colorado embracing the several counties centering around South Park was one of the richest sections of the state. From Colorado Springs westward, especially near Leadville, where the peaks of the Continental Divide rear their heads to snow-covered heights of ten-thousand feet or more, the country abounded in great quantities of natural resources—gold, silver, lead and coal. Below that vast stretch of country between Colorado Springs and Leadville, and especially in the vicinity of Glenwood, the coal fields were the finest and most extensive in the state, if not in the entire United States. From this coal there was made a most excellent grade of coke, quite equal in quality to that made in the historic section of Connellsville, Pennsylvania.

Up to about the year 1886, the only railroads anywhere near this section were parts of the Denver & Rio Grande and the Union Pacific systems. The Denver & Rio Grande Railway was a 3-foot gauge line running from Denver, in Douglas county, to Pueblo, via Colorado Springs, and from Pueblo, via Salida and Buena Vista, to Leadville, in Lake county—some 160 miles to the westward. There was also a branch, five miles in length, running from Colorado Springs to Manitou.

The Union Pacific Railway was the 3-foot gauge part of that system which was formerly the Denver, South Park & Pacific Railroad, running from Denver, southwest via Como, Garo and Hill Top, to Buena Vista, where it connected with the Denver & Rio Grande. There was also a narrow-gauge branch of this system which ran northwest from Como to Leadville, via Breckenridge and Frisco.

These two roads formed somewhat of a triangle, through which no railroad ran. Neither were there any railroad facilities whatsoever through some of the most fertile regions west of Leadville.

It was then, with the purpose in mind of developing the metallurgical industry of the state, and of supplying with means of rail transportation a part of the state heretofore devoid of it, that the building of the Colorado Midland Railway, the "Pike's Peak Route", and an independent Corporation, unidentified with any other then in existence, was planned.

From the city of Colorado Springs, which offered rail connections over the Denver, Texas & Gulf, and the Denver & Rio Grande lines with Denver to the north, and Pueblo to the south, as well as with the Eastern trunk lines to Chicago and beyond, the main line of the Colorado Midland, as projected, extended west to the town of Manitou, thence through Ute Pass by easy grades, across South Park, by Hill Top and the valley

of the Arkansas River, to Leadville, a distance of about 135 miles. From here, the road ran in a westerly direction 18 miles to the Saguache Pass, where it crossed the range by a tunnel 2200 feet long.

Very shortly after emerging from the western portal of the tunnel, the line entered the valley of Frying Pan creek, down which it ran to its junction with the Roaring Forks creek, to Glenwood Springs. At the junction of these two creeks a branch extended south for a distance of 18 miles to the town of Aspen, a well-known mining town, in the heart of a most picturesque country, abounding in fish and game. From Cardiff, a few miles from Glenwood Springs, another branch also reached southward to the immense coal fields at Elk Creek, in Jerome Park and vicinity.

After the road was in service as far as Glenwood Springs, its management began to reach out for more territory. This was with an eye ultimately to extending the road on through to Ogden, Utah, and then west to San Francisco, thus making it an important link of a transcontinental chain from the Atlantic to the Pacific. With this in view, trackage agreements were entered upon with the Denver & Rio Grande, whereby the Colorado Midland trains ran on to Rifle Creek, thence down through the region of the Grand Valley, to Grand Junction. This point was destined to be the most westerly terminus of the road as long as it remained in existence.

The road, being the first standard gauge line **penetrating the heart** of the Rocky Mountains, was incorporated under Chapter XIX, of the general laws of the State of Colorado, and organized November 23, 1883 as the "Colorado Midland Railway Company". It was not, however, until nearly five years had elapsed that the necessary surveys were made, the organization and financial plans perfected, the road actually constructed and the trains in operation.

By the end of the month of January, 1886, complete surveys for the road had been made, following a route from Colorado Springs, via Leadville, with the intended branch to Aspen, westward as far as Glenwood Springs—a total distance of 221 miles. Toward the end of the following March, it was announced that enough persons interested in the project had been found to secure the necessary financial aid for the construction of the first section of the road from Colorado Springs to Leadville, a distance of 135 miles. Among these backers were Orlando Metcalf, of Pittsburgh; the Honorable Irving Howbert, J. J. Hagerman, J. F. Humphrey, J. H. Link, and C. A. Lansing, of Colorado Springs; Charles A. Otis, of Cleveland; E. W. Edwards of Durango; and William D. Sloan, J. R. Busk, Samuel S. Sands, J. B. Wheeler, and F. D. Tappen, of New York City. Later when the organization was more fully completed, J. J. Hagerman became the road's first President, and J. B. Wheeler first Vice-president. Orlando Metcalf became second Vice-president, and C. H. Lansing was named Secretary.

Next came the advertising for bids on materials and construction. This resulted in the initial contract being let early in April 1886 to Messrs. Orman, Crook & Company, of Pueblo, for the construction of that part of the road from Leadville to Aspen. The contract included

the building of a tunnel nearly 2200 feet long, (later known as the Hagerman tunnel), through Sugar Loaf Mountain, a part of the Continental Divide. Grading was started immediately at several points along this section, and continued uninterruptedly for three months, when it was temporarily suspended because the Midland's management felt that the rates charged by the Denver & Rio Grande Railway, which had been carrying supplies and materials to the advancing seat of operations, were unreasonable. It was then decided to arrange for trackage rights with the Denver, Texas & Gulf Railroad, and to commence operations on the stretch between Colorado Springs and Leadville. By this new trackage agreement, in return for which the Colorado Midland extended financial aid to the Denver, Texas & Gulf, the former road would thus carry its own supplies at a considerable saving, since the road in the process of construction was to be tracked and equipped as fast as it was graded. The agreement was immediately put into effect, and by July 1886 there were about one thousand men working on the grade from Leadville, and north of Rock Creek, eastward, a distance of 76 miles.

While this was going on, more attention had also been directed toward the financial end. Several more backers had been enlisted, including John Sloane, F. F. Thompson, Gordon Norrie, and M. K. Jessup, of New York; Frederick Ayer of Lowell, Massachusetts, and D. P. Seller and William Lidderdale, of London, England, and the financial plans to carry out the entire enterprise were completed at this time.

Coincident with these negotiations, construction work was started at Colorado Springs for the advancement westward, through Colorado City, and Manitou, (the "Saratoga of the West"), and into Ute Pass, a few miles farther on. Toward the end of July of the same year the contracts for this portion were let to Streator & McMurtrie, who immediately sublet that contract for the first four miles west out of the Springs to S. T. Wicks. The latter began work at once.

The work at this point was exceedingly heavy and difficult, necessitating the erection of several high bridges over the numerous creeks in the locality, and the building, also, of several tunnels. The first of these, Tunnel No. 1, was at Manitou, and was approached by a four per cent grade. Despite the many obstacles, however, the work progressed rapidly and without interruption, the grade being well up the mountain side by November. Rail laying, of 65-pound steel, started shortly afterward, and before another month had passed, the rails were in place for three miles out of Colorado Springs, and the grade entirely finished westward through Woodland Station, Divide, Florissant, the Eleven-mile Canyon, and to the Platte River—some 40-odd miles.

By the middle of the following March much more progress had been made. The last of the bridges near the entrance to Ute Pass was up. Track-laying had advanced over 25 miles, and the grade was finished to Hill Top, a distance of 85 miles west of the Springs, and within 31 miles of Buena Vista. Also, the work west from Leadville, toward Aspen, which, it will be remembered, had been temporarily abandoned some time before, had been resumed.

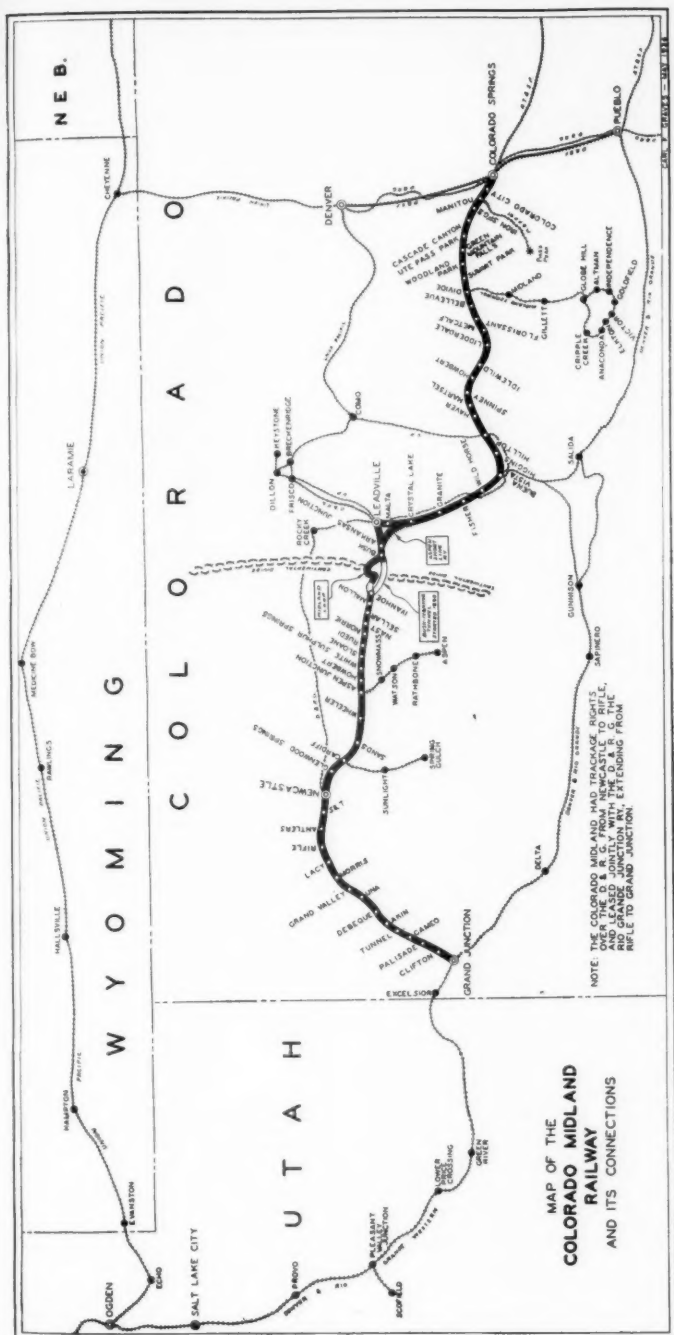
Meanwhile, work on the Hagerman, or "Saguache" tunnel, as it was sometimes called, had been progressing, and the bore had attained a depth of 1000 feet, about one-half of its completed length. Since the building of this tunnel presented some difficult problems, and was regarded, with its approaches, when built, as a marvelous piece of engineering, it may be of interest to know some of its characteristics and details of construction.

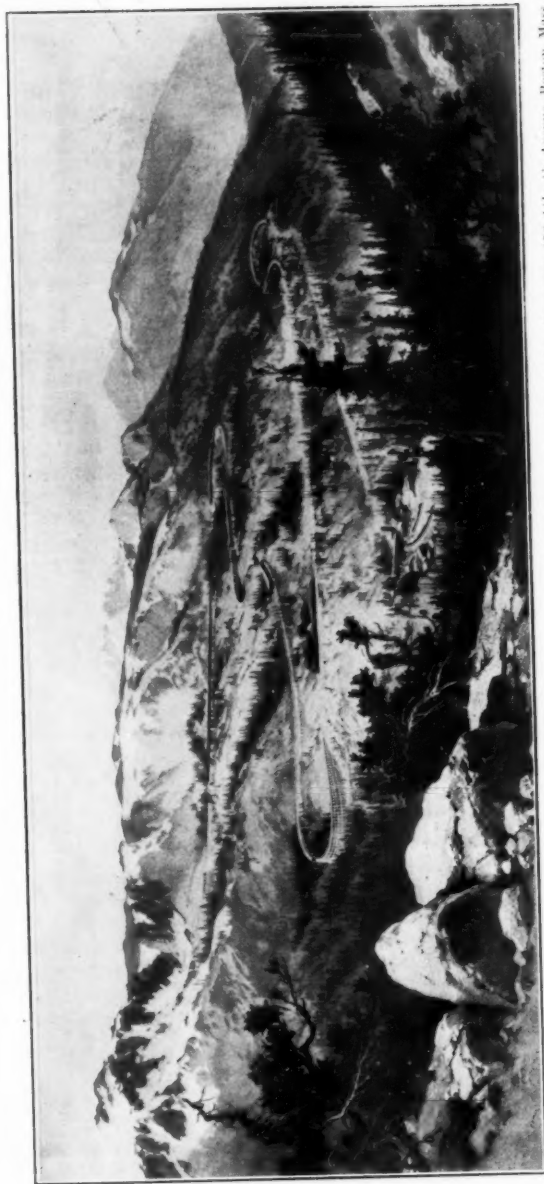
The Hagerman tunnel, so named for the President of the road, Mr. J. J. Hagerman, was two-fifths of a mile long, or, to be exact, 2,164 feet. It was bored through the apex of the Saguache Range of the Continental Divide, barely less than 500 feet below the very summit. Approached by a tortuous, winding track, known as the "Midland Loop", which began at the little town of Busk, about three-quarters of a mile east of the tunnel itself, and which doubled back upon itself twice in this short distance in its ascent of the mountain, high above Lake Gulch, the tunnel followed a nearly straight line, running slightly north-west, and entered the side of the mountain at an elevation of approximately 11,530 feet. The western portal emerged at a point about a mile and a half east of the town of Ivanhoe, close by the shore of the small but picturesque Loch Ivanhoe. Like the rest of the road, the tunnel contained but a single track, with a westward ascending grade of a little over 1.5 per cent.

Construction work was now being pushed rapidly at several strategic points along the 170-mile stretch of line between Colorado Springs and a point a few miles west of Ivanhoe. The grade was already finished for a distance of 75 miles out from Colorado Springs, and 300 men in the track-laying gangs were laying rail at the rate of a mile a day. This alone kept six locomotives busy furnishing the rails and ties, many of which were of special grade oak, received from Missouri and Indiana, for use in the sharp curves, since their safety had been tested and found superior to the ones of native pine.

Since it was apparent that the road would be ready for service at least as far as Buena Vista by the early summer of 1887, thought was now given to the acquiring of additional rolling stock, since up to this time only three "Consolidation" type locomotives and a very limited number of freight cars had been received. Accordingly, the Company contracted for an order of 25 locomotives, 35 passenger service cars and about one thousand freight cars.

The first fifteen of these locomotives were of the ten-wheel, or "4-6-0" type, and were built early in 1887 by the Schenectady Locomotive Works, at Schenectady, New York. They were designed for passenger service between Colorado Springs and Leadville, over four per cent grades, and through a succession of 16-degree curves, (357-foot radius), on rails weighing 65 pounds per yard. The driving wheel-base was, therefore, short, being only 12 feet, 0 inches; and as the front pair of drivers had no flanges, the effective rigid wheel-base was only 6 feet, 6 inches. In order to surmount the four percent grades, the tractive force was considerable, being nearly 165 pounds per pound of average pressure in the cylinders,—about 22,400 pounds.





Courtesy of John A. Lowell Bank Note Company, 470 Atlantic Avenue, Boston, Mass.

THE CONTINENTAL DIVIDE—HAGERMAN PASS, COLORADO.

Copy of an engraving. Original Painting by Charles Graham

At the time, the lot of engines was the heaviest and most powerful ever constructed, and each engine was equipped with Westinghouse brakes for tender and train, American steam brake for all drivers, and the LeChatelier water brake for the cylinders.

For those who have more than a passing interest in these early Colorado Midland locomotives there follows below a table giving more detailed specifications:

Gauge	4' 8½"
Fuel	Bituminous coal
Weight in working order	125,000 lbs.
Weight on drivers	99,000 lbs.
Wheel base, total	23' 3"
Wheel base, driver	12' 0"
Wheel base, rigid	6' 6"
Cylinders, diameter	19"
Cylinders, stroke	26"
Slide Valve	Richardson's Patent Balanced
Style of boiler	Wagon Top
Firebox length	96½"
Firebox width	42½"
Firebox, depth front	58¼"
Firebox, depth, back	50¼"
Throttle	Balanced valve in dome
Grate surface	28.6 Sq. ft.
Heating surface, tubes	1780.75 Sq. ft.
Heating surface, firebox	133.34 Sq. ft.
Heating surface, total	1914.09 Sq. ft.
Tubes	234, — 2¼" O. D.
Injectors	Two — Right and left
Boiler pressure	160 lbs.
Crown	Stayed by crown bars, welded at ends, 5" x ¾"

All of the Midland's engines were of the best workmanship, and the earlier ones especially were things of real beauty. Some of them were built by Schenectady and some by the Baldwin works. Some also, much later, were turned out by the American Locomotive Company. The earlier types had capped stacks, and were highly painted and decorated. The tenders bore the two words "Colorado Midland" in large letters along their sides. Above this inscription, and usually on the coping, the engine number appeared. On some of the cabs, beneath their three wide windows, was the road's distinctive insignia. This was composed of a triangular-shaped band superimposed on a circular band. The triangle bore along its three sides the words "Pike's Peak Route", while around the circle "Colorado Midland Railway" was lettered. Above this, and at the apex of the triangle, was a star. For many years this insignia appeared on all of the Company's time-tables and advertising literature, as well as on its rolling stock. The insignia differed on some of the engine cabs, being simply the two words "Midland Route", placed on a scroll beneath the windows.

The earlier engines bore numbers in the usual place on the smoke-box door, and on the sand-box, and also on the sides of the headlight, but not on the cab. Much later, however, they did have them in this location, and the inscription on the tenders was shortened to simply the two

initials "C. M." Even later, after a reorganization took place, and the road's name was slightly changed, the tenders bore "C. M. R. R." on the coping, and the stenciled numbers were confined to the cab and headlight only. These later engines also had straight stacks, and a style of headlight which was distinctly their own.

The entire first order of passenger-car equipment was built by the Pullman Palace Car Company at its shops in Pullman, Illinois. By the end of July 1887, that part of the order including the drawing-room and sleeping cars had been delivered and the remaining cars were nearing completion rapidly. The initial order included, besides the drawing-room and sleeping cars, First Class day coaches, Second Class cars, combination baggage and passenger cars, suburban cars, baggage and mail cars, and baggage and express cars. Throughout, the specifications called for "Pullman Standard", with all the most recent appliances and improvements.

The following extract from the "Railway Review" of July 30, 1887 will give the reader a clearer idea of the construction and appearance of these cars:

" The color selected for the interiors is a rich, dark umber, which, while not so striking at the first glance as some of the livelier tints, wears well and does not so soon look shabby. All the cars are equipped with the Westinghouse automatic air brakes, and Miller platforms, modified for greater security on grades and curves; while the wheels throughout are either Allen paper wheels or the Paige patent steel tired wheels. The trucks are of the Pullman standard pattern, those under the sleeping coaches having six and those under the other cars four wheels each. The axles are all of Otis steel. The windows are unusually large, so as to give the best possible view of the scenery in passing. They have double sashes, and are 24" wide by 34" high. Heat is supplied by Baker's patent heaters, placed in closets lined with incombustible material, over which is laid a sheeting of zinc, for protection against fire in case of accident—an important feature for heating cars that will be much appreciated by the travelling public. The cars are ventilated from the ends, and the large clearstory sashes provide ample supplementary ventilation.

"The seats are set low, with high backs,—a feature that anyone that has travelled much will appreciate. The drawing-room and sleeping cars are luxurious masterpieces of construction, being almost exact duplicates of the Pullman vestibule cars, of which so much has been written, the only difference being that in the Colorado Midland cars, the exterior vestibule is omitted, though the construction is such that they can be added whenever they may be found desirable. These cars are 60' 9" long by 9' 8" wide over the sills. The interiors, including the drawing-rooms, are finished in mahogany, while the smoking rooms are done in genuine English oak. The ceilings are of white wood, richly decorated. The windows are wide and high, with "double combination Gothic" mahogany sashes, and the lights in the clearstory are of French embossed glass. The seats are upholstered in maroon and old gold plush, and the floors are covered with rich Wilton carpets, while the trimmings

are all silver plated. Each car is furnished with nine 2-light center lamps and four single-light bracket lamps, thus making it entirely easy to read the finest print at night. There are three saloons, one ladies', one gents', and a private one in the annex to the drawing-room. Besides the drawing-rooms, each car contains ten sections, or twenty double berths. These cars are among the handsomest that have ever left the Pullman shops.

"The First Class day coaches, which will be run on all except suburban trains, are 48' 0" long and 6' 6" high from top of sills to the underplate. There are sixteen windows to a side, the sashes being mahogany. The interior finish is mahogany with oak panelling. The seats are Mason's patent, with mahogany frames and high backs, upholstered in maroon and old gold plush. The glass in the clearstory is embossed and the ceilings are panelled and decorated. The trimmings throughout are of bronze, and light is supplied by four double center lamps, arranged in line, about double the number of lamps ordinarily used in passenger cars. Each car is provided with two saloons and two marble washstands, and have handsome smoking rooms finished in solid mahogany with a large mirror in each, an entirely new feature in ordinary passenger coaches, and one that the travelling public cannot but approve. The seating capacity of these cars is 55 persons each.

"The Second Class cars are in dimensions and plan the same as the First Class cars, the chief difference being in the finish, which is of oak and cherry, and the upholstering, which is of maroon leather. The seat frames are oak, and the trimmings are of bronze. Light is furnished by three double lamps. These cars seat 58 persons each.

"The suburban cars are 50 feet long, and are finished, like the Second Class cars, in oak and cherry. The seats are upholstered in rattan and are arranged as in the cars of the New York Elevated roads, longitudinally at the ends, and transversely in the middle. They have four lamps each, and seat 58 persons.

"There are also some handsome combination cars, seating 38; some roomy and convenient baggage and mail cars, and an equal number of baggage and express cars."

With a substantial share of the newly-ordered equipment on hand and ready for service, and with delivery of the rest expected in a matter of a very short time, the final bit of work on the first 100 miles of road was finished toward the end of June 1887. About two weeks later, on July 13, train service was inaugurated between Colorado Springs and Buena Vista, marking the actual beginning of the "Colorado Midland Railway", familiarly known as the "Midland Route", and the first standard gauge road to cross the Continental Divide.

Meanwhile, as the road began to enjoy an ever-increasing patronage, and to show indications of rapidly becoming an important factor in the development of the newly-opened territory through which it ran, construction gangs were steadily at work pushing the line westward. On September 1, train service was extended to Leadville. This town, in Lake county, was 33 miles west of Buena Vista, and about 135 miles from the road's eastern terminus, Colorado Springs. It was one of the

most famous mining localities in the world, where were discovered and mined gold and silver to the value of millions of dollars. In the following four months, the westward advance of preliminary grading, followed closely by the laying of steel, had shown so much progress, that even before the beginning of the new year, 1888, the Hagerman tunnel had been completed, the road had been opened as far as Glenwood Springs (a point 80 miles beyond Leadville), and the 18-mile branch running southeast from Aspen Junction, through Snowmass, Watson and Rathbone, to Aspen, had also been finished and placed in service. Thus, in the matter of about twenty-one months, about 238 miles of standard gauge railroad had been built through some of the most rugged sections of Colorado, and across the Continental Divide, necessitating much heavy rock work, numerous tunnels, and many bridges. The completion of this phase of the undertaking made it possible for passengers to journey uninterruptedly from Denver, via Colorado Springs to Glenwood Springs, or to the great mining camps about Aspen, and was regarded as one of the notable achievements of 1887.

Shortly before the formal opening of the line to Glenwood Springs, a town long renowned as a health resort because of the medicinal properties of the many springs abounding in the region from which it derived its name, President Hagerman purchased the famous Springs and immediately made plans to build there a large hotel, with a view to making this section a desirable and popular resort. The project met with instant approval, and during a meeting in the early part of 1888, the Directors appropriated the sum of \$250,000 for the building of the hotel and bath houses, which were to cover an area of 90 by 700 feet. The hotel was named "Hotel Glenwood", and later, along one side of it were built two huge swimming pools containing hot water.

An interesting article, mentioning, among other matters, this venture, appeared in the "Railway Review", under the date of June 9, 1888. It is as follows:

"The directors of the Colorado Midland have just completed an inspection of the road, and found everything satisfactory. It is stated that the directory again tendered J. J. Hagerman the Presidency of the Company, but his health being very poor, he was obliged to decline the office. When the final declination was received, it was decided to tender the position to John Scott, until recently actively connected with the Erlanger system, and particularly with the Queen & Crescent Route.

"Regarding the possible extension of the Colorado Midland westward, it can be said that it is reasonably certain that the Company will soon build to Salt Lake City.

"The proposition is one involving about fifteen million dollars, but when the time arrives, assurance is given that no difficulty will be experienced in raising an even larger amount, if necessary. The proposed extension is, however, largely dependent upon the success of another enterprise—the construction of a road from Salt Lake City to Los Angeles.

"The directors, while at Glenwood Springs, decided upon the immediate erection of the mammoth new bath house, and orders have

been issued authorizing the execution of the work, with all possible haste, and making an appropriation of \$250,000."

Almost before train service had been extended to Glenwood Springs, a new contract was let to Carey Brothers, of Ogden, Utah, covering the construction of the next link, a 12-mile stretch westward, to the town of New Castle. Work was pushed with the usual vigor, and in the matter of ten months' time, or by October 20, 1888, trains were arriving at this town from Leadville and the east, with construction work reaching out still farther to the westward.

It will be recalled that an earlier paragraph stated the fact that the Hagerman tunnel was approached from the east by the "Midland Loop". This feature, with its many sharp curves and steep grades, presented a difficult operating problem, and before the tunnel had been in actual service a year, plans were discussed for the survey of a new tunnel line, in an endeavor to effect better conditions. Concerning this, an article appearing in the September 1, 1888 issue of the "Railway World", under the title "Colorado Midland Extension", is quoted:

"It is stated that surveys are being made for a new line across the Saguache Range, which this road now crosses by means of the Hagerman tunnel, 17 miles west of Leadville, at an altitude of 11,500 feet.

"The Denver Republican says: 'The tunnel is approached by a marvelous piece of engineering, including the Midland Loop, and several winding tracks, one above the other on the mountain sides, many hundreds of feet above Lake Gulch. The Hagerman tunnel is nearly one-half a mile long and is through the apex of the Continental Divide, and the water which flows from it flows both into the Atlantic and Pacific oceans. The heavy grades on this line suggested the proposition of finding another line below the Hagerman tunnel, beginning at the station Busk, on the Atlantic slope, and coming out near Loch Ivanhoe, on the Pacific slope. Such a tunnel would be about three miles long but it would cut off 10 or 12 miles of the road, and the loop, and some heavy grades where the track winds about the mountain. The building of such a tunnel would be a gigantic enterprise, but it would appear from the report that surveyors are on the ground, that the Midland Company, which has in the past shown much courage and enterprise, is seriously thinking of making the proposed cut-off.'"

That the Colorado Midland was serious in its intentions of locating and building a new tunnel was borne out by the fact that surveyors really were in the field, and actually located the new line in November, 1889, and that work on the tunnel proper and its approaches was commenced in the early summer of 1890. The project was a stupendous undertaking, and attracted much attention. For the moment, however, we will leave the Busk-Ivanhoe tunnel, as it was called, and return to it at a later point.

About the same time that the road's management was interesting itself in a new tunnel line, it was also much concerned in devising a scheme to avoid, especially for freight trains, the hard, long climb into Leadville, occasioned by the extremely heavy grade of four per cent, and the winding, many-curved track which climbed the range into the town

from Crystal Lake, through Malta and Eiler. New surveys were made, and a line was run in a north-westerly direction from Crystal Lake to a point where it rejoined the main line again a short distance west of Leadville. This point, 6.6 miles from Crystal Lake station, became known as Arkansas Junction. As soon as the surveys were completed, contracts were let, and work begun at once. During the first week of January, 1889, the cut-off was formally opened to traffic, and was leased to the Colorado Midland Railway Company for the sum of \$8,800 per year, and under the name of the "Aspen Short Line Railway" with a Board of Directors composed of men who were also connected with the Colorado Midland. Several years later, on December 1, 1893, this road was consolidated with the Midland. This new cut-off did not alter the original "high line", over which trains bound for Leadville continued to operate as before.

Not only did this region about Leadville mean difficult train operations, but the 30-odd mile distance from Leadville southeast to Buena Vista meant the same. This was a section of many curves, and at an average elevation of about 9000 feet above sea-level, with grades of nearly 2 per cent in places. Daily trips over this stretch were not without their thrills and risks on the part of the train crews, and many a story could be told by some of the old timers of the Midland.

Believing the reader might be interested, the following incident, the result of which might have been much worse than it was, is related. It was told by Mr. A. M. Cuthbert, and concerns his father, Mr. D. A. Cuthbert, who was at this time an engineer on the Colorado Midland:

"One afternoon Dad was called at Leadville to run light to Wildhorse, turn, and double-head on No. 5 back up the river. It rained all the way down, and was still raining as they started back. Just at dusk, when lights are not very good but yet when it is too dark to see well, Dad noticed a spot on the rails which did not reflect the gleam of the headlight. He shut off, and "big-holed" the train, but they were into the place before they could stop. Dad felt his engine, the No. 47, turning over toward his side, so he jumped. The engine rolled over on her right side, and that was that.

"Investigation showed a broken rail,—a length being kicked clear out of the track, but with no cause apparent at the time. After daylight it was found that a huge rock had fallen from a cliff nearly half a mile away, raced across level country, hopped the right-of-way fence, hit the rail, and knocked it out. The rock then hopped the other fence and rolled several hundred feet beyond the right-of-way!

"No one was hurt, however. As it was just dinner time, several passengers had their meals served in a hurry in the dining car. Among them, and well spattered, was the train master, Mr. Spahr."

We have now reached the year 1890, which, to the Colorado Midland, offered significant events, both favorable and adverse, and which, in a way, marked the beginning of a long and vigorously-waged contest by rival interests for the control of the road, which at the first of the year had reached a point about 14 miles west of New Castle, known as Rifle Creek.

Of the favorable events, and one which did much to help the physical condition of the road, the most outstanding was the launching of the huge program to construct the since-famous Busk-Ivanhoe tunnel, mention of which has previously been made. On June 16, 1890, there was incorporated the Busk Tunnel Railway Company, headed by J. R. Busk as President, and T. M. Davis as Vice-president, to build the tunnel, the connecting tracks, and other necessary work. The estimated cost of all this work was in the neighborhood of about \$955,000. On the day after its incorporation, this Company was leased to the Colorado Midland Railway Company for 999 years, the agreement stipulating that the lessee was to pay a rental of 25 cents per ton for all freight, and the same amount for each passenger moved through it. In addition, the lessee was to pay for all maintenance of the tunnel and approaches. Coke was to be used for locomotive fuel in operating westward through the tunnel from the Busk end, while ascending the grade. Eastbound trains worked no steam at all through the tunnel, since the grade was descending, and the locomotive fires were therefore banked for this period.

Michael H. Keefe, of Butte, Montana, who had recently completed the 7,000-foot Wickes tunnel for the Montana Central road, was the contractor to whom the job of building the tunnel was awarded on July 25, 1890. Other contracts with supply houses were also closed for necessary materials. One of the larger firms which contracted for boilers, rock drills and other tunneling machinery was the Ingersoll-Sergeant Rock Drill Company, of 10 Park Place, New York City.

The projected tunnel proper was slightly over three miles in length, and of this, 1.78 miles, or 9,398.40 feet, made up the tunnel itself, which was 15 feet wide and 21 feet high in the clear. It contained but one track, and the grade descended uniformly east, from Ivanhoe to Busk, (a point 12.3 miles west of Leadville), at a rate of 1.41 feet per 100 feet, the Busk end being 134 feet lower than that at Ivanhoe.

That the new line afforded several advantages over its predecessor will be apparent when the following comparisons are noted: The total length of the new line was 3.25 miles, and the distance between the same points on the old line was 10.8 miles, a saving in distance of 6.93 miles; the elevation of the highest point on the grade of the tunnel line was 10,947.7 feet above sea level, against the Midland's 11,528.3 feet, a saving of 580.6 feet in elevation. On the new line there were 141 degrees of curvature, and 2099 degrees on the old, so that the saving was 1958 degrees.

The maximum grade on the new line was, as already stated, 1.41 feet per 100 feet, against 3.00 feet per 100 feet, or a reduction of 1.61 feet per 100. The total length of the new tunnel was 9398 feet, and the greatest depth of cover over the top was 1128 feet.

On the day following the signing of the contract, operations were commenced at Ivanhoe on the approaches and other outside work. The approaches were quite heavy, and the heading at the east, or Busk, end was not turned until the 15th of September, 1890, and at the west, or Ivanhoe, end until October 8, 1890.

The bottom of the approach at the Busk end was completed, and the bench started on October 8, 1892, and at the Ivanhoe end on October 30, 1892. Up to the 31st of July, 1892, 5483 feet of tunnel had been driven; 5544 feet of heading, and 5422 feet of bench, leaving 3856 feet of heading, and 3978 feet of bench to be driven, equal to 3917 feet of tunnel. In May 1891, the largest month's progress was made, when 335 feet of tunnel was driven, and March 1892 was the smallest month, when the amount driven was only 143 feet.

The tunnel was driven through gray granite, in some places firm and hard and so homogeneous that timbering could be dispensed with, although for most of the distance timbering had been necessary, since the material was so broken and blocky that it was necessary to support it. In some places the granite had been dissolved by some chemical action, and, although it might have been very hard and firm when the heading was first driven through it, it soon began to slack on exposure to the atmosphere, and unless it was immediately caught up and timbered into place, serious cave-ins occurred. In other places, there were encountered large seams of talc that caused serious trouble, but the greatest difficulty encountered by the contractor was the wide seams in the granite filled with liquid mud, which, when released, rushed into the tunnel in such quantities as to endanger the lives of the workmen. There was one case recorded where one of the workmen was smothered to death before he could reach a place of safety only twenty feet from where he stood when the mud-flow occurred.

The undertaking, being of the magnitude that it was, necessitated a considerable outlay of auxiliary equipment at both ends of the tunnel during its construction. Such equipment at the Busk end consisted of three 80 h. p. boilers, two Ingersoll-Sergeant compressors with 20"x24" cylinders; one Ball dynamo, (later permanently installed), which furnished electricity for lighting the tunnel; one 40 h. p. steam engine running a No. 6 Baker blower, and nine 3½" Ingersoll Sergeant drills. There was a small locomotive engine running on a narrow-gauge track, which handled the muck cars in and out of the tunnel.

At the Ivanhoe end, the plant consisted of three 100 h. p. boilers; two Ingersoll-Sergeant compressors with 20"x24" cylinders; one Norwalk compressor of the same size; an old style Ingersoll compressor with 16"x20" cylinders; a 10 h. p. steam engine running an electric light dynamo, and steam engine running a No. 6 Baker blower.

As a consequence of the grade of the tunnel descending uniformly from the Ivanhoe to the Busk end, at a rate of 1.41 feet per 100 feet, water followed the workings into the hill at the Ivanhoe end, and a No. 7 Cameron pump, with a 3" discharge, capable of handling 100 gallons a minute, and also a No. 9 Cameron pump with a 4" discharge, and a 200 gallon-a-minute capacity, were employed in keeping the tunnel free from water.

In addition to the apparatus already mentioned as being employed at the Ivanhoe end, there was also in reserve for emergencies a Deane duplex pump with 14" steam and 8½" water cylinders, with a 400-

gallon capacity. There was also another locomotive for handling the muck cars. These engines were built by the Porter Works, and burned coke for fuel.

Work was pushed vigorously on the tunnel, and its connecting line, and although progress was fairly rapid, many and almost insurmountable difficulties were met which considerably delayed the work. In June, 1893, reports showed that the boring was completed except for 1300 feet. On July 21, 1893, Michael Keefe, the original contractor, voluntarily surrendered charge of the work, due to the fact that the three years' exposure in the high altitudes had seriously affected his health. At the time of the surrender of the work, he had completed 8478 feet of the tunnel, and the operations were then assumed by B. H. Bryant, Superintendent of the Colorado Midland, and Chief Engineer of the Busk Tunnel Railway Company. In his progress report dated August 15, 1893, he showed that 644 feet yet remained to be bored. On September 12th, 4958 feet had been driven at the Busk end, and 4105 feet at the Ivanhoe end. This left about 330 feet yet to be completed, and it was then reported that headings were expected to meet in early October.

Predictions proved to be right, and, after three years of hard day and night labor, headings met on the morning of Wednesday, October 18, 1893. For days previous, the men worked under a high pressure of excitement. The opening was made, and workmen from each side met shortly after midnight, and the work of final clearing away, and timbering went on steadily until morning.

Before the end of the year the rails had been laid through, and the snow sheds had been built at each end of the tunnel. On December 17th trains began running through, thus completing a job undertaken against the judgment of experienced engineers, and in spite of a succession of obstacles since the start. The project effected for the Colorado Midland a saving of seven miles of distance, and an ascent of 700 feet, which, on the old line, in spite of long protecting snow sheds built at great cost to protect the approaches of the old tunnel, caused heavy operating costs during the unusually severe winters of this region.

While the building of the Busk-Ivanhoe tunnel was going on during the three years from 1890 to 1893, another important move was made which had a beneficial effect on the Colorado Midland. Shortly after the road was opened to New Castle, late in October 1888, the road was extended 14 miles farther west to the town of Rifle Creek. This point, on the western edge of a fertile coal region, and slightly over 230 miles rail distance west of Colorado Springs, was the western terminus of the Midland until after June 1890. This point was also the western terminus of the Denver & Rio Grande's northern line which followed somewhat closely the line of the Midland from Leadville.

Through the Grand Valley, which was situated between New Castle and Grand Junction, there was no railroad, since the Rio Grande Western's line from Salt Lake City ended at Grand Junction, and the Denver & Rio Grande's line to Salida ran sharply south-east toward Delta and Montrose upon leaving Grand Junction for the east.

It was clearly seen that if this gap could be bridged, a solid, unbroken chain would thus be formed, which would allow for through traffic

from Denver and the east to Salt Lake City and the west, benefitting not only the Colorado Midland, but, through possible trackage agreements, the Denver & Rio Grande and the Denver & Rio Grande Western as well.

As may be remembered, it was stated that the promoters, back in 1887, entertained the same idea of reaching outward to the west coast, and had actually planned to build their line at least as far as Salt Lake. Even though the line never was built to this point, the ambition of the Midland people was, in a way, realized, but not by the method they supposed it would be. Instead, a new idea presented itself, which, when carried out, solved some of the difficulties under which the three roads in this locality had been operating for many years.

Late in 1889 there was organized what was known as the Rio Grande Junction Railway, with a capital stock of \$2,000,000, and with a bond issue of about \$23,000 per mile, guaranteed by both the Denver & Rio Grande and the Colorado Midland companies. This organization proposed to build a standard gauge line between Rifle Creek and Grand Junction, which, when built shortly afterward, proved to be the means of relieving the long-standing difficulties and somewhat strained relations which had abounded among the railroads in this section.

Construction of the line, 63 miles long, was started immediately, and, although delayed considerably by difficulties in obtaining track materials, and in getting sufficient labor, the work was finished late in September, 1890. Like the Midland, this line, too, had but a single track.

While this work was going on, both the Rio Grande Western and the Denver & Rio Grande (narrow gauge lines) were busily engaged in laying a third rail, the former from Ogden to Grand Junction, and the latter from Denver to Rifle Creek. Thus, when the Rio Grande Junction road was opened on November 16, these roads, now standard gauge, were ready to inaugurate through train service in both directions.

Since the Denver & Rio Grande line extended west beyond New Castle, to Rifle Creek, whereas the Colorado Midland line went only to New Castle, it meant that the latter road, in order to enjoy the benefits of the Utah traffic, had to effect some sort of trackage agreement over the former's line. To this end, then, a special meeting of the stockholders of the Colorado Midland was called to be held at Colorado Springs to act on a proposal to lease an undivided moiety of the Denver & Rio Grande's line between New Castle and Rifle Creek. Also, at this time, action was taken on a proposal to lease jointly with the Denver & Rio Grande the new Rio Grande Junction line between Rifle Creek and Grand Junction. These two actions received favorable disposition, and before the end of the year 1890, luxurious trains, with entirely new equipment, including chair cars, sleepers, diners and day coaches, were regularly running over the seventh through-car route across the American continent, the opening of which was considered a notable event, significant of the vast increase in the volume and importance of transcontinental traffic which had developed during the past few years.

About two months before trains began running into Grand Junction, over the leased portions of the Denver & Rio Grande and the Rio Grande Junction Railways, there sprung up in railroad circles the first of many

rather disconcerting rumors. These rumors were to the effect that the Atchison, Topeka & Santa Fe Railroad Company was about to launch a deal by which it would "take over" the Colorado Midland, and probably guarantee its four per cent bonds. These rumors, at first unfounded but yet undenied, were persistent, and finally it was announced that, at a meeting in Boston, Massachusetts, on October 25, 1890, the Santa Fe directors approved of the proposed acquisition of the Midland, and officially agreed to the contract of purchase which had been entered into September 5, 1890.

For quite some time prior to this event, the Midland had had an agreement with the Atchison to interchange traffic, and had agreed to give all the business it legally could to them to haul to Denver and to Kansas City. However, according to the Atchison, the Colorado Midland had, since the first of July, failed to live up to this agreement, and this fact, and the great desire on the part of the Atchison to regain the business thus lost, was advanced as the reason for the purchase.

Within a month of the meeting on September 5, the sale was consummated, and the control of the Colorado Midland Railway Company was placed in the hands of the Atchison through the acquisition of the entire capital stock, representing an investment of \$1,600,000 in cash and 53,334 shares of stock. The road's official title now became the Colorado Midland Railroad Company.

On November 1, 1890, actual direction of the management of the Midland was turned over to the Santa Fe, but it was not until May 1893 that this latter road assumed direct control and began to include in its accounts the Midland's operations for each entire fiscal year. The road became the Atchison's "Colorado Midland" division, and traffic over it destined to local points north of Colorado Springs, which previously had been carried entirely by the Denver & Rio Grande, was at once diverted to the Atchison's Denver division.

The year 1891, which was now at hand, was of little significance in so far as further progress of the Colorado Midland was concerned. It saw the Midland being operated under its new name, but practically by its original personnel, except that it was headed by the Atchison's executive forces, and under their indirect control. It was also still being operated as the "Colorado Midland" division of the Atchison, and was so indicated on all of the time tables of the road. At this time, its mileage, including all branches and tunnels, either owned or leased, was 350.42 miles.

Business was good, with both freight and passenger traffic on the increase. Freight earnings jumped, especially shortly after the advent of the new control, notable increases resulting from greater shipments of coal, coke, ore, lime, limestone, hay and grain. Through passenger traffic, too, was on the increase, as well as the suburban service from Colorado Springs to Woodland Park, which ran frequent trains each way daily. In connection with this suburban service, the Midland, several years later, made an innovation which, because of its unique character, became very famous. Every Thursday the road ran up through Ute Pass to Green Mountain Falls and Woodland Park what was known

as the "Wild Flower Excursion", exclusively for the pleasure of its passengers. Obliging agents were sent along to point out objects of interest, of which this country is full, and stops were made to gather flowers and to view the matchless scenery.

No story of the Colorado Midland, even though short, would be quite complete without some mention at this point of the Midland Terminal Railway. We will take a moment, then, for a quick survey of a line which played an important part in the development of a world-renowned mining district.

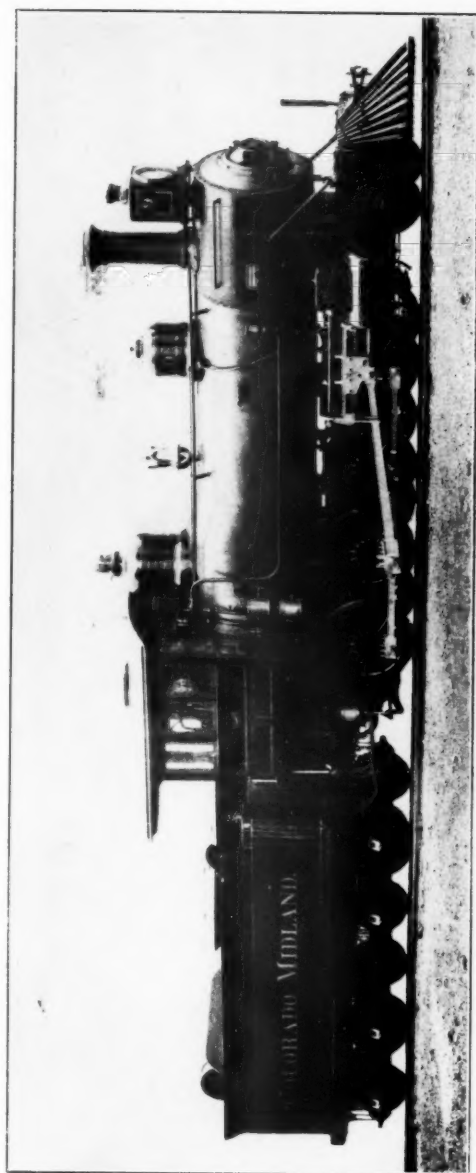
A few miles south of the town of Divide (on the Colorado Midland), and about 23 miles south by west in an air-line from Colorado Springs, at the base of the western slope of Pike's Peak, was situated the town of Cripple Creek. In the area surrounding this town large deposits of gold were discovered in 1891, and since that time over \$369,000,000 worth of the metal has been produced from that region. The discovery of this gold resulted in a tremendous rush to the district, and also in the incorporating under Colorado laws, on August 9, 1892, of a new company to build a branch line to the mines there in order to cope with the ever-increasing traffic.

This standard gauge road was incorporated as the Midland Terminal Railway Company, and ran from Colorado Springs to Cripple Creek, via Manitou, Divide, Cameron, Independence, Victor and Anaconda. Its total length was 55.7 miles, and through a traffic agreement the Colorado Midland's tracks were used from the Springs to Divide. From this point south to Cripple Creek (29.4 miles), its own tracks were used.

Tentative plans for building this road were formulated early in 1892, and preliminary surveys were made in March of that year. A second, and even later, in July, a third survey was made which finally located a line through a new pass which was said to have saved between \$50,000 and \$75,000 in construction costs over the preliminary runs. The new line survey which, incidentally, shortened the distance from Denver to Cripple Creek by seventy miles, passed through fine quarries of marble and gypsum, some undeveloped coal lands, and a heavily timbered region, and showed the maximum grade to be 158 feet to the mile, and the maximum curve to be 12 degrees. There were to be no iron bridges, but the plans called for ten important trestles, the longest of which was 375 feet. There was also to be a tunnel 475 feet in length.

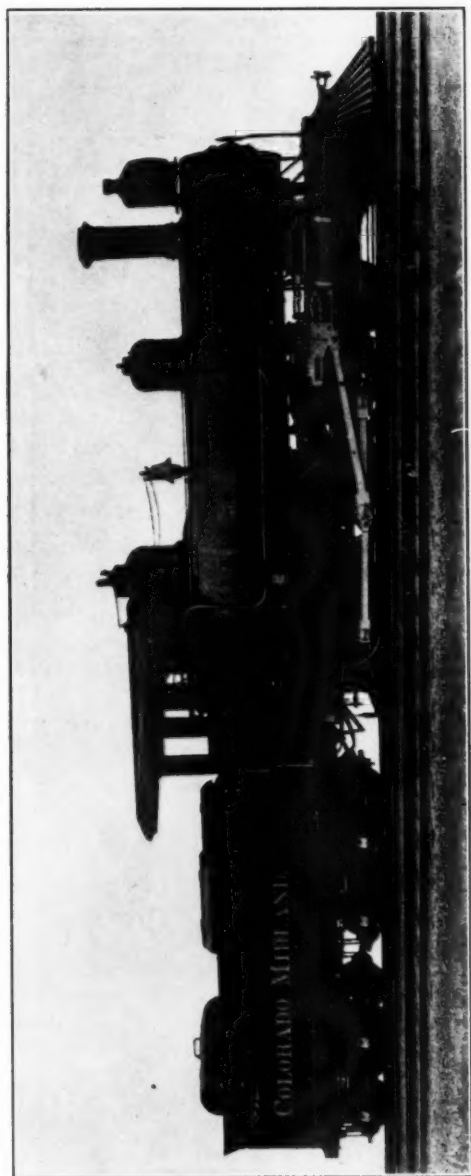
Although construction began very shortly after the plans were accepted, there were many set-backs, among which finances and the very severe winters with heavy snows played an important part. Work at one time was indefinitely postponed, and the project remained dormant for many months. The line was finally completed, and train service to Cripple Creek began on December 19, 1895. Later, when the summer passenger traffic became heavy, through service from Cripple Creek to Denver was inaugurated, whereby, by agreement, the Midland Terminal's cars were routed over the Denver & Rio Grande and the Santa Fe roads.

The securities of the Midland Terminal line were acquired a few years later by the Denver & Southwestern Railway Company. This lat-



Courtesy American Locomotive Co.

COLORADO MIDLAND #9, SCHENECTADY, 1887.



Courtesy American Locomotive Co.

COLORADO MIDLAND #23, SCHENECTADY, 1887.

ter company was incorporated under the date of November 18, 1899, for the purpose of carrying out a plan of the consolidation of the Midland Terminal Railway, the Florence & Cripple Creek Railroad, the Golden Circle Railroad, the La Bella Mill, Water & Power Company, and the Colorado Trading & Transfer Company, all of which operated in the Cripple Creek Mining district. On October 4, 1904, the assets of the Denver & Southwestern were sold at auction, and following this, the company was reorganized as the Cripple Creek Central Railway Company, which continued to control the several small roads involved. In the summer of 1917, the property of the Midland Terminal company was leased to the Cripple Creek & Colorado Springs Railway Company, at a rental of \$6,500 a month, but on January 1, 1919, upon the consummation of the lease, the Midland Terminal resumed the operation of its own property. About three years later the road purchased from the Colorado Midland the 26.9 miles of line from Colorado Springs to Divide, and also purchased from the Cripple Creek & Colorado Springs Railway the 4.91 miles of track from Victor to the end of the line.

The road is in operation at the present time, and its two scheduled mixed trains (one each way daily except Sundays), are still running through Ute Pass on their way to and from Cripple Creek over the sole remaining section of what used to be the old Colorado Midland Railroad. The equipment at the present time consists of 9 locomotives (some purchased from the Colorado Midland), 15 passenger cars, 233 freight cars, and 22 miscellaneous cars. The road's first President was H. P. Lillibridge. The present holder of that office is Spencer Penrose, who, in 1917, was the Chairman of the Board of the Colorado Midland.

In order to follow closely the destinies of the Colorado Midland, which was still operating under the title of the Colorado Midland Railroad Company, although under Atchison control, we must go back to the last month of the year 1893—the year in which the Busk tunnel was opened. At this time, financial difficulties began to be apparent. Both the Atchison system as a whole, and its subsidiary, the Midland, had been operating at a loss for nearly two years, with a deficit piling up at an alarming rate. The Midland's reports showed for the fiscal year of 1891-2 a deficit of \$238,000 and for 1892-3 one of \$489,000. The Atchison found that it could not provide for its floating debt and the interest on the general mortgage falling due on January 1, 1894, and the road was placed into receivership on December 23, 1893, under J. W. Reinhart, J. J. McCook and Joseph C. Wilson.

When this took place, J. R. Busk, W. D. Sloane, F. F. Thompson, and the Right Honorable William Lidderdale, ex-governor of the Bank of England, were appointed as a bondholders' committee for the Colorado Midland, to represent the interests of the bondholders in any necessary negotiations with the receivers of the Atchison road.

Not long afterward, the consolidated mortgage interest due on February 1 was not paid by the Midland, and this road, too, went into receivers' hands. The same men who were acting as the Atchison's receivers were appointed receivers also for the Midland by Judge Caldwell of the United States Circuit Court on February 2, 1894.

Until May 1895, the Colorado Midland was operated under this receivership. Rumors of an application of a separate receivership by the bondholders, and of plans for a reorganization of the Midland were heard late in the year 1894, since it was believed that the revival of the Leadville mining industry, due to the new gold discoveries, would earn a profit for the road. These moves, however, were held in abeyance pending the publication of the Atchison's reorganization plans in March 1895, and it was not until April 29, 1895 that the application was actually granted by Judge Caldwell. J. J. McCook, J. C. Wilson, and A. F. Walker, (succeeding J. W. Reinhart, who resigned in September 1894), relinquished their posts, and George W. Ristine was appointed Receiver in their stead.

Under Mr. Ristine's able management, the physical condition of the Colorado Midland Railroad Company was greatly improved. The roadbed was given considerable attention, and all the available rolling stock was overhauled and repaired. The financial condition of the road also received from Mr. Ristine careful attention, and the future looked bright. Traffic showed an increase, and ore shipments were greater than at any time since 1892. Earnings too, showed an increase over previous years. For the first three months of 1895 the net earnings were \$130,000 better than for the same period in 1894, and each following month showed an increase over the preceding one.

The reorganization plans were still in the minds of the Midland's bondholders, but it was decided that, although conditions had been materially bettered under the new receiver, no definite plan would be worked out until after June 30, 1896, since it was deemed advisable to ascertain the earning power for the full twelve months before taking final steps to rehabilitate the property. Concerning this decision, there appeared in the issue of April 17, 1896 of the *Railroad Gazette* the following statement of Mr. Lidderdale, who was then acting as the Chairman of the London Bondholders' Committee: "The London Committee are strongly impressed with the belief in which their New York colleagues and the Receiver entirely concur, that no scheme of reorganization at once, just to the bondholders and fairly certain in its results, can be presented until the railroad shall have been administrated by its own Receiver for at any rate one full year.

"When the statements for that period are before the committee, they will at once address themselves to a consideration of such a scheme.

"The organization will probably embrace the retirement of the Busk Tunnel and the Aspen Short Line bonds, which carry heavy interest rates as well as due provision for improvements of the roadbed, for rebuilding some of the bridges, and for an increase of rolling stock."

The year 1896 was a year of unfavorable financial conditions. During the first few months, the increasing betterment of conditions on the Midland continued. With the revival of the mining industry in the State, and the free interchange of traffic with connecting lines, there came a hopeful and consistent increase in revenue. These conditions, however, were short-lived, for in June the miners in Leadville went on a strike, and all the silver mines were closed. This strike continued for

quite some time, and seriously affected the earnings of the Colorado Midland. Although some equipment bonds were paid, the Receiver failed to remit the funds to meet the coupon due on July 1, 1896 on the Busk Tunnel and the Aspen Short Line bonds. In addition to this, the Consolidated Mortgage, due early in 1894, and the interest on the First Mortgage, due in June 1894, were not paid.

The result of this situation was the entering, in the United States Circuit Court, at Denver, on May 4, 1897, of a decree ordering the foreclosure sale of the Colorado Midland Railroad Company, under both the First Mortgage of 1886, and the Consolidated Mortgage of 1890. This action took place because it was felt that the sale had to be made, else the receivership might be vacated and the rights and interests of the bondholders would be seriously impaired. It was understood, that, if sold to or by the interests of the Bondholders' Committee, the property and assets of the road would be conveyed to a new company, to be arranged under the laws of Colorado.

Shortly afterward, the Reorganization Committee, under Chairman Frederic P. Olcott of New York City, having felt the time propitious, matured a plan of reorganization which received the assent of a majority of the bondholders. The plan was dated June 11, 1897. Toward the end of the following month, or, exactly, on July 23, 1897, this plan was adopted at a meeting held at the Central Trust Company in New York City.

About the time that the plan of reorganization was made public, there were rumors circulated by certain newspapers, to the effect that the Denver & Rio Grande Railroad Company was negotiating to operate the Midland. This, however, was denied by the Rio Grande's Chairman, Mr. Coppel, who stated that it would be undesirable to acquire or control a parallel road. The fact was established later, that Mr. Coppel had earlier offered to buy the Colorado Midland, and it probably was from this fact that the rumors arose.

On September 8, 1897, at twelve o'clock noon, the entire property of the Colorado Midland Railroad Company was sold at foreclosure. The sale, as advertised in advance in accordance with the Court decree, took place at Colorado City, on the property of the company, and under Special Master William M. McGuire. This property which was sold included all that property held under a mortgage by the Central Trust Company of New York City, and amounted to nearly two million dollars. All the bidders were required to hand in with their bids a certified check for five thousand dollars. The property was purchased by Henry T. Rogers, of Denver, who represented the mortgage trustee, for the sum of \$295,000, or \$5,000 more than the aggregate upset price of the two parcels into which the property was divided.

This sale was confirmed by Judge Caldwell, of the United States Circuit Court, at Denver, ten days later, and on October 12, 1897 a certificate of incorporation of a new organization, known as the Colorado Midland Railway Company, was filed at Denver. At a meeting held on October 30, George W. Ristine, the former receiver, was elected President and Manager of the newly organized company, which took posses-

sion of the property at midnight the following day, October 31, 1897, when the receivership was lifted.

The Busk tunnel bondholders, because of certain financial arrangements following the sale of the Colorado Midland, refused to accept the reorganized company, and the use of this tunnel which had been leased by the original Colorado Midland Railway Company had to be abandoned. Consequently, very shortly after the transfer of the property, the old Hagerman Pass line, with its tunnel and famous approach-loop, was again put into condition for service, and the track connections to the Busk-Ivanhoe tunnel were taken up. Shortly before the old Hagerman tunnel was again brought into service, an inspection trip over the line was made by some of the road's officials. When they reached the tunnel which had been abandoned for so long a time, it was discovered that about 2400 feet of its length was filled practically solid with ice. Thirty days were required to dig it out, it being necessary to use dynamite, since the use of fire and salt provided inadequate.

For about eighteen months the old tunnel was in use, since the negotiations with the Busk-Ivanhoe tunnel people were unsuccessful, because of the insistence of the tunnel bondholders for a bond secured by a mortgage rather than the bonds of the railroad company covering all the property. However, about June 10, 1899, an agreement was finally reached, where the tunnel bonds, aggregating \$1,250,000, were exchanged for the Colorado Midland 2s, 3s and 4s, bond for bond, and the Colorado Midland Railway Company became the owner of the tunnel.

Concerning this situation which involved the two tunnels, the following editorial appeared about a year later, in the *Railway & Engineering Review*, under the date of July 14, 1900:

"The Colorado Midland Railway has abandoned the Hagerman Pass line as an operating proposition, and the track and bridges on the 9.8 miles of road around the Busk tunnel are being taken up. The route through the Busk tunnel is something like seven miles shorter than the old line through Hagerman Pass, and saves something like 700 feet of elevation. This is not the first time the Hagerman route has been abandoned. A number of years ago this route was given up for the shorter one through the Busk tunnel, but readers will remember that about two and one-half years ago a disagreement arose between the railroad company and the private company owning the tunnel, when the old line over the Pass was put into serviceable condition and operated for about a year and a half, or until about a year ago, when traffic through the Busk tunnel was again resumed.

"Now the line over the Pass is being abandoned for the second time, and with some appearance of permanency, for not only is the track being taken up, but some very long trestles are being taken down.

"The Hagerman tunnel is a little more than 2000 feet long, and has, for many years, been the highest point on a standard gauge railroad in the United States, the elevation being 11,528 feet.

"The Busk tunnel is 9,768 feet long, and its elevation is 10,805 feet.

"The Colorado Midland road is one of the most noted scenic routes in the country, and the Hagerman Pass the most interesting scenic point, owing to its high elevation.

"Scenic attractions, are, however, subordinate to business enterprise in railroading, as in other vocations. Still, the road runs high enough as it remains."

Things went along smoothly for a time following the organization of the new Colorado Midland Railway Company, late in 1897, but in the Spring of 1898 another strike in the mining industry occurred, which closed all of the smelters. This strike was caused by the passage of a law by the Legislature restricting certain classes of labor to eight hours work per day. Although the duration of the strike was not so long, and the law was later declared unconstitutional by the Supreme Court, it had the effect of decreasing considerably the earnings of the road. On November 20, 1898, a fire at Colorado City destroyed the locomotive erecting shops, and the boiler shops, which caused considerable loss, and necessitated the expenditure of a large amount of money in erecting new structures, all of which added another burden to the road's already heavy load.

Still another decrease in the gross earnings of the road came in the early months of the following year, 1899. This was caused by a snow blockade, during one of the worst storms that the mountain sections of Colorado ever experienced. The storm occurred toward the end of January, and from the evening of the twenty-seventh day of that month until the evening of April 14, that part of the road between Arkansas Junction and Basalt was completely closed. There were drifts from ten to forty-five feet deep in places. Before train service was again resumed, nearly \$73,000 were spent in an untiring and constant effort to keep the road open.

The following is a rather interesting account of the great fight waged at this time to clear the line. This article by Sam M. Colman, of Leadville, Colorado, appeared in the June 1899 issue of the *Locomotive Fireman's Magazine*, under the title "Bucking Snow on the Colorado Midland":

"The great storm of 1899 has passed into history, but it will long be remembered by the people of Leadville, Colorado. It was the most severe storm ever known in the mountains. In the streets of Leadville, the snow was very deep. A person walking down one side of the street could not see the other side for snow. Probably the worst sufferer was the Colorado Midland railroad. After leaving Leadville, the road runs west over the Saguache range of the Rocky Mountains. At the altitude of 11,528 feet is the Hagerman tunnel. Below the Hagerman tunnel is the Busk-Ivanhoe tunnel, which is over two miles long, and pierces the range from Busk on the east, to Ivanhoe on the west. Owing to difficulties between the railroad company and the tunnel company, this tunnel has not been used for some time. Therefore the railroad company had to use the Hagerman tunnel, which is much higher on the range. The storm king seems to have concentrated its baleful energies around this tunnel, and from the 27th of January, 1899 to April 17th, 1899 held undisputed possession—no, not undisputed, as the Colorado Midland had an army at work most of the time. On January 27, the rotary plow went over the range to Basalt. Then they could not get back. On Feb-

ruary 28 they came to Leadville via the Denver & Rio Grande, which was open. Then the Colorado Midland organized their army. This army assembled each morning with the rising of the sun, when the western mountains were rosy with the approaching sunlight.

"The artillery led the van. Out of the round-house slowly steam eight of the largest type of locomotive; huge black puffing monsters which form in single file with military precision. They are the escort for the mighty rotary "08", the largest and best triumph of inventive skill for clearing a passage through the huge drifts of snow. The line of march is quickly formed. First, by right of might, comes the big rotary. Behind her are six large engines, throbbing with vitality. Next comes the 'Snow Bird Special' which consists of several baggage cars loaded with men who are known as snowbirds. This army of snowbirds is armed with picks and shovels. They are not all uniformed alike. Some have overshoes on their feet, while others have theirs wrapped in gunny sacks. One has a pair of dark glasses to protect his eyes, while another has blackened his face with a piece of charcoal. All sorts of men go to make up this army.

"About 7.00 A. M. the army advances on the enemy. Up the mountain, higher and higher it climbs, until the advance guard sights the enemy.

"The rotary signals to halt, and then the snowbirds get into action. Out of the cars they tumble, and are sent forward in a skirmish line. The snow is so deep that it is necessary to dig trenches across the track so that the rotary can do its work. When the rotary stands facing this big bank of snow, it is a formidable looking object. Within a square steel frame which reaches from a few inches from the rail to a height of twelve feet, are set the blades of the great wheel. This wheel is operated by a powerful engine, the boiler of which is larger than a locomotive boiler. It is run by three men—engineer, pilot and fireman. Soon comes the command to advance. It is truly fascinating to watch the monster approach. The great steel frame, with the wheel revolving with lightning-like rapidity, is all that is visible. The monster, with six engines snorting and puffing behind, enters the snow bank.

"Then comes the beautiful sight of a Rotary throwing snow. Often the efforts of the six engines cannot push the plow into the hard snow. The battle ceases for an instant. They back up and come on again. Then they force the plow too fast and the wheel cannot take care of the vast amount of snow. Another stop. So on, all day long. Some days the storm is so bad that the plow cannot get back to Leadville. One plow was snowed in twelve days at Busk and another one seventy-five days at Ivanhoe. At night the army came back to the city and rested. Next morning the same scene was enacted. The officers of the army were:

B. H. Bryant, General Superintendent

A. L. Humphrey, Superintendent of Motive Power

S. S. Morris, Train Master

Mr. Gilbert, Superintendent of Bridges and Buildings

"They worked hard all winter and to them is due the credit of raising the blockade. Everything is running smoothly now, and the Colorado Midland Railway ('Can't Move Railroad' as some one said) is happy once more."

The Colorado Midland Railway had barely adjusted itself following its reorganization in 1897 before further stories of a disquieting nature began to be circulated. Early in March 1900 it was rumored that negotiations were pending for the transfer of the Midland to the Colorado & Southern Railway, and that the Rio Grande Western Railway was also interested. The Colorado & Southern Railway was the successor to the Union Pacific, Denver & Gulf Railway, and the Denver, Leadville & Gunnison Railway Companies, which was chartered late in 1898, with parts of its lines touching the Midland at Colorado Springs, Leadville and Hill Top Junction. There were no actual statements made in official circles, but neither were there any denials of the rumors, and within less than a month the following statement was issued by the Colorado Midland Railway:

"The voting trustees announce that they have received from responsible persons an offer to buy the stock represented by voting trust certificates outstanding on July 2, 1900 at \$30.00 per share for preferred stock and \$12.50 per share for common stock. Under the terms of the voting trust agreement, the voting trustees are empowered to sell such stock upon written consent of the majority in interest of stock trust certificates outstanding at the time of such sale.

"The trustees recommend the acceptance of the offer. Transfer books will be closed from May 18 to June 18."

The rumors proved to be correct, for a majority of the stockholders assented to the terms of sale which was promptly effected at a valuation of 30 for the \$4,979,800 worth of preferred shares, and \$3,421,300 worth of common shares. Control of the property was officially turned over to the new syndicate representing the Colorado & Southern and the Rio Grande Western Railways on July 2, 1900. The line, although now under new control, continued, however, to be operated separately, since the laws of Colorado prohibited the consolidation of parallel or competing roads.

When the transfer was made, Frank Trumbull, President of the Colorado & Southern, was elected President of the Midland, and Colonel D. C. Dodge became Vice-President. The road's General Manager was Charles H. Schlacks, formerly Assistant General Manager of the Denver & Rio Grande railroad. New directors also were elected at this time.

Colonel Dodge, who was also Vice-President and General Manager of the Rio Grande Western Railway, made the following statement for the Denver *Republican*, in explanation of the purchase:

"The move was made by the Rio Grande Western and the Colorado & Southern Railways to keep conditions stationary. It was not to gain any advantage over a rival, but to keep a rival from gaining an advantage over us, and particularly over the Rio Grande Western.

"The combining of the interests of the three roads will not materially affect the railroad situation in Colorado.

"The Colorado Midland will be operated as a separate organization, and in all respects, for its own interests. The property will have the advantage of closer connections with the Colorado & Southern on one hand, and the Rio Grande Western on the other. The management of the Colorado Midland will do nothing for the benefit of the two connecting systems which will be hurtful to the Colorado Midland.

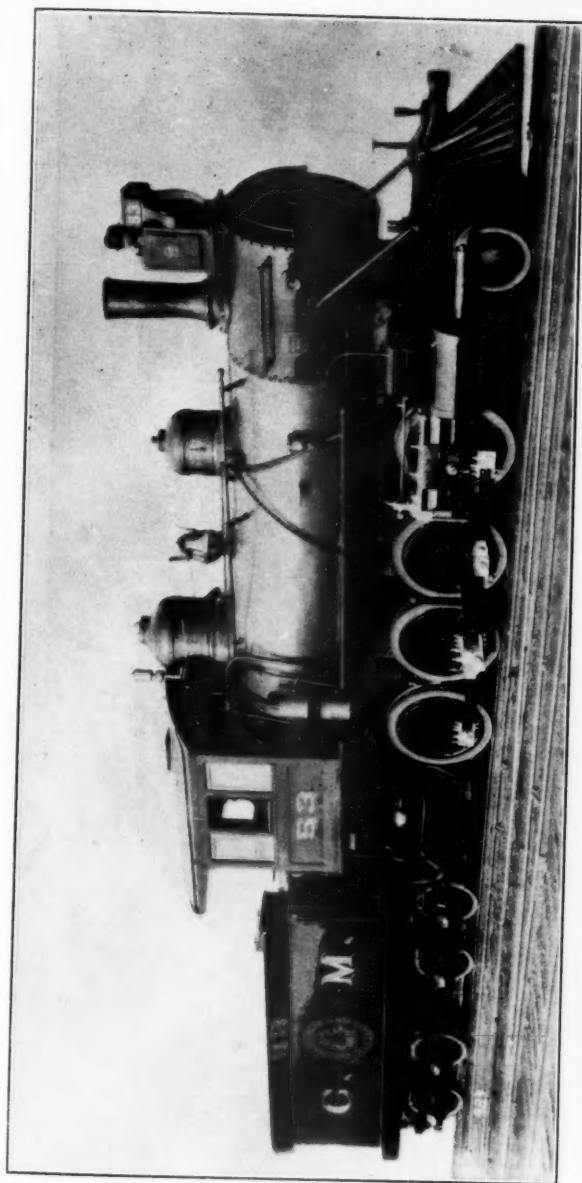
"The Colorado & Southern, even now, will be able to reap some benefit from the connections into the mountains, which the Colorado Midland will afford it, while the Rio Grande Western will be able to maintain its original divisions on traffic with its connection, which, under other circumstances, it would not have been able to do."

Two rather important projects were launched during the early summer of 1900. One project concerned the Colorado & Southern Railway, and involved the changing from narrow to broad gauge of the tracks of their own line in and around Leadville. The other undertaking concerned the Colorado Midland, and had to do with an important line change, which necessitated the building of a new line about twenty-four miles in length, from a point near Thomasville (about forty-two miles west of Leadville) to Basalt, and along the Frying Pan Creek. The purpose of this was to eliminate between thirty and forty sharp curves, and a number of steep grades.

Not so long after one-half interest in the Colorado Midland was acquired by both the Colorado & Southern and the Rio Grande Western Railways, the management of the Rio Grande Western was taken over by the Denver & Rio Grande Railway. About the same time the Colorado & Southern Railway was acquired by the Minneapolis & St. Louis Railroad by purchase in the open market. The first of these two moves allowed the Denver & Rio Grande Railway to succeed automatically to the interest in the Midland, and the second made it possible for the Minneapolis & St. Louis Railroad to acquire a joint interest in the Midland with the Colorado & Southern. The result was that into the history of the Colorado Midland were brought the names of such prominent figures in railroad circles as Edwin Hawley, then President of the Minneapolis & St. Louis Railroad, and the famous Goulds, (George Jr., Edwin and Howard), all of whom were on the Board of the Denver & Rio Grande at the time.

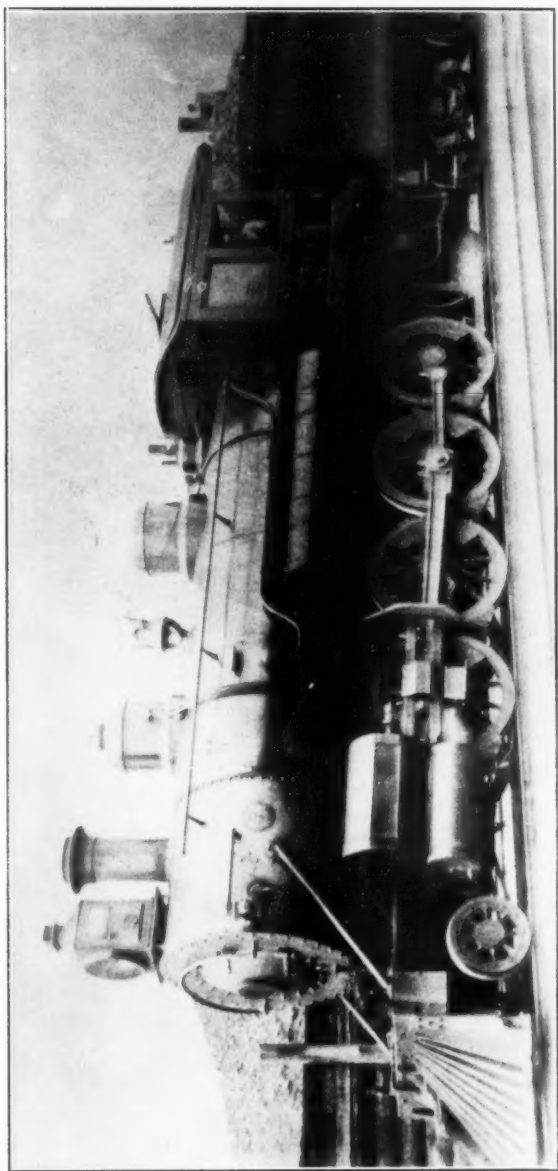
During the six years following the entrance, late in 1901, of the Gould-Hawley interest in the road, little of any great significance transpired which materially affected the Colorado Midland in any way. The road was being operated as the "Colorado Midland Railway Company," although it was still under the indirect control of the Colorado & Southern and the Denver & Rio Grande roads. Frank Trumbull, of the Colorado & Southern, was the President, having retained the office since his appointment to that position in the summer of 1900. Charles H. Schlacks, of Denver, and the former General Manager, was elevated to the office of Vice-President.

Business conditions in the country had begun to pick up, following the depression of 1896. Most of the railroads, including Colorado Midland, were earning a surplus, and official attention was once more being



COLORADO MIDLAND #53. Baldwin 1897.

Courtesy Baldwin Locomotive Works



Courtesy Messrs. A. M. & D. A. Cuthbert

COLORADO MIDLAND #204, Baldwin 1901.
Photo taken at Leadville, Colo.—1901.

centered on improvements in the service, and in general betterments of the line. Pursuant to this idea, the Midland found it necessary, early in 1901, to add two hundred new freight cars, and five new passenger cars to its equipment. It also was decided to lay 75-pound rails on its heavy grades throughout the line.

From the time Colorado first became a state, it had often been visited by labor troubles so serious in nature that they assumed the aspect of wars. Late in 1902 strikes among the miners of various locations in the state began to cause considerable trouble, and to affect quite seriously the railroads, many of which began to report losses in operation.

These strikes still continued in 1903, since the legislature failed to pass an eight-hour law, which was provided in a constitutional amendment adopted the year before. In August of 1903 the smelting and reduction plant operators went out, and on November 9 of the same year, the coal miners followed. The former group was inaugurated by the Western Federation of Mines, and involved mostly the men employed in the metalliferous mines in the Cripple Creek and Telluride districts. This strike, occurring in the Cripple Creek district, was the most serious of them all, and necessitated the calling out of troops to maintain order. The trouble continued for months, and was marked by many riots, and an incident involving the killing of thirteen non-union men, who were blown up by a bomb while they were on the railroad station platform at the town of Independence.

Following the settlement of these disturbances, economic conditions tended to better themselves more generally in the territory mostly covered by the Colorado Midland, and for a few more years the prospects looked bright. However, in 1907, along with another general let-down in business in that section, there came a pronounced decrease in the mine production in the Cripple Creek district, with the result that the earnings of the road were once more beginning to show a decline, since ore shipments constituted a large share of the business of the Midland.

In December 1908, the Chicago, Burlington & Quincy Railroad acquired \$23,657,500 worth of common stock (practically a controlling interest) in the Colorado & Southern road, which was held by Edwin Hawley and his associates. The result of this was the election, early in 1909, of Daniel Willard, now President of the Baltimore & Ohio Railroad, to the Presidency of the Midland, as successor to Frank Trumbull. At the same time, George B. Harris, President of the Burlington, and W. T. Clough, Vice-President of the Great Northern, and Daniel Willard were elected to the Colorado Midland's Directorate, thus marking a further step in the transfer of the control of the Colorado & Southern and allied lines from the Edwin Hawley interests to those of the Burlington system. At the time all this took place, Daniel Willard was the Burlington's Second Vice-President. However, Mr. Willard's term as President of the Colorado Midland was short-lived, for early in 1910 he was replaced by A. D. Parker, who was Vice-President of the Colorado & Southern.

During the next two or three years following, general economic conditions were again at a low ebb, and the incomes of many of the Colorado railroads, including the Midland, suffered as a result. To add to the

general distress, incomes of the roads in the Cripple Creek district were further curtailed, due to the fact that many of the mines in that locality suspended operation during the years 1909 and 1910, pending the completion of what was known as the Cripple Creek Drainage Tunnel, or, as it was sometimes called, the Roosevelt Tunnel. The purpose of building this tunnel was to drain the deep mines of seeping water, and had the effect of lowering the general water level in the district several hundreds of feet, thus allowing the sinking of shafts far deeper than could have been done formerly.

However beneficial this improvement was for the mining industry, it was of little aid to the railroads, at least during its construction period, and matters continued to grow worse for them. Toward the close of the year 1911, the balance sheet of the Colorado Midland showed liabilities of \$389,354 in excess of its assets. President Parker had resigned, and had been succeeded by George W. Vallery, who, since 1900, had been the road's General Manager. In addition, the credit of the road was such that it was unable to procure additional cash by issue of securities.

Because of this state of affairs, the Colorado & Southern saw that its interest in the Midland's stock was in danger of becoming valueless. In order to prevent this, the Colorado & Southern, on January 23, 1912, brought suit against the Trust Company of America, and the Central Trust Company, both of New York City, to get permission to sell their one-half interest in the Colorado Midland. The requested permission was granted, but for considerable time thereafter the actual sale was held up due to legal difficulties that were encountered.

Early in March 1912, it was rumored that the Midland, which had not earned its interest for several years, would default on the next bond coupon, due the coming July, as a step in the direction of a readjustment of the company's business. This rumor proved true, and, early in November, in view of the default, a committee under the Chairmanship of J. N. Wallace, President of the Central Trust Company, was formed. The Committee's secretary was Landon K. Thorne. This committee urged the bondholders to unite for mutual protection, by depositing their bonds with the Central Trust Company as depository. On November 13, 1912 a sale at auction of \$523,000 First Mortgages of the Colorado Midland Railway at 16 per cent, and \$737,500 worth of stock of the Rio Grande Junction Railway at 55 per cent marked the closing out of demand notes due on the first of July. The Rio Grande Junction Railway stock was bought by the Denver & Rio Grande Railroad, and its purchase marked the beginning of a long drawn-out law-suit that was later brought by G. W. Vallery, as Receiver of the Midland, who charged the buying road with fraud in its dealings. The suit lasted over five years, or until December 13, 1917, when it was withdrawn by Mr. Vallery after the Denver & Rio Grande road agreed to pay \$125,000 and costs by way of settlement.

On December 13, 1912, a month after the auction sale of bonds, the United States District Court, at Denver, placed the Colorado Midland Railway in receivership, under its President, George W. Vallery. This

move was made on application by the Central Trust Company, trustee of the first mortgage bonds, which acted at the request of the Wallace Committee.

Following the placing of the Midland into receivership for the second time, four years passed without event, with the road being operated as usual, over a distance of 335 miles. This mileage included the 18-mile branch to Aspen, and the 15-mile Jerome Park extension, which ran south from Cardiff, near Glenwood Springs, to the town of Spring Gulch. George W. Vallery was still the Receiver of the road, and his headquarters were in Denver.

On Monday, February 12, 1917, in the Federal District Court at Denver, Judge R. E. Lewis entered a decree of foreclosure of the road, under the First Mortgage of 1897, securing \$9,532,000 worth of outstanding bonds. The date for the sale was set for April 21, after an application by the Committee for an adjournment of the foreclosure had been denied. The sale took place on the appointed date, under Special Master W. L. Dayton, and on the property of the Company at Colorado City, just west of the Springs. The purchaser was Mr. Albert E. Carlton, and associates, of Colorado Springs. This group of men represented those who had become wealthy in the Cripple Creek mining industry, and who had the interest of the country served by the Midland at heart. They disliked to see the old familiar landmark pass into the hands of the opposing bidders, who had in mind merely the junking of the line. Each time the opposite side named a bid, the Carlton group raised it by amounts which seemed like small fortunes, until the figure of \$1,400,000 was reached. Following this, Mr. Carlton raised them \$25,000 more and the opposition decided to stop. The road was knocked off to Mr. Carlton, who thereupon threw his derby hat into his car and went about among his employees, shaking hands with each one of them.

Of this latest transaction of the Colorado Midland Railway, the Denver "News", under the date of April 22, 1917, had the following to say:

"The joining of Denver and Salt Lake City with the rich copper fields of the Watson and Vernal regions in Utah is contemplated by Mr. Carlton and his associates. Plans so far indicated provide for the building of two links in the system that will connect the Colorado and Utah capitals, while two other links necessary to the chain already are owned or controlled by the Colorado Springs group headed by Mr. Carlton.

"The new owners propose, it is understood, to use the South Platte branch of the Colorado & Southern Railway from Denver to Bath, Lake County, (128 miles), thence to Grand Junction the Midland will be used. From Grand Junction to Fruita, Colorado, the company will acquire for the Midland the interurban system operating 21 miles of track, now plying between those towns, and, incidentally, controlled by Mr. Carlton and associates. A stretch of nine miles from Fruita to Mack, Utah, must be built up to connect with Uintah Railway at the Utah City. The Uintah road, (extending from Mack, Colorado, on the D. & R. G., to Watson, etc., 68½ miles) is said to be controlled or owned outright by

the Carlton group. The new owners have an option on the road from Watson, north to Vernal, Utah, the heart of the copper district, and from Vernal to Salt Lake City it will be necessary to construct a new road.

"Mr. Carlton is President of the Cresson Gold Mining Company, and one of the largest stockholders in the Golden Circle Gold Mining Company.

"Other bidders for the Colorado Midland Railway were Arthur Herr, of Denver; George P. Johnson of Richmond, Virginia and New York; Gerald Hughes of Denver, representing the Central Trust Company of New York; Edwin Grime and M. S. Rodestsky, junk dealers; and Nathan Rosenblatt, of New York."

A new plan of reorganization, under the date of March 15, 1917, had been prepared and submitted shortly before Mr. Carlton acquired control of the road, but it was abandoned without ever having been acted upon.

This plan was prepared by the Wallace committee which issued a formal statement following the entering of the decree of foreclosure. A digest of this statement, together with a plan of reorganization, which appeared in the March 24, 1917 issue of the "Commercial & Financial Chronicle", is as follows:

"This Committee, constituted by the agreement of November 15, 1912, has carefully considered the situation of the Company, and has received advice as to its possibilities in the future. In view of the poor earnings, largely due, we believe, to business conditions existing before and after the outbreak of the European war, and in view also of the litigation now in progress to recover for the Company certain of its former treasury assets, we had deemed it advisable to delay reorganization in the expectation that a better showing might be made and the litigation determined. The entry of a decree for foreclosure sale on April 21, 1917 makes it necessary that a plan be at once submitted to the bondholders if their interests are to be protected.

"While the Committee believes that the pending litigation involving, among other things, the ownership of nearly one-half of the stock of the Rio Grande Junction Railway Company, if not advantageously settled, will ultimately be decided in favor of the Midland Company, the new Company should have sufficient cash and credit to enable it adequately to protect itself by making necessary extensions in the event of an adverse decision in such litigation. The plan is not underwritten, but after April 18, 1917, it will be possible to determine whether a sufficient number of bondholders have accepted the plan to make it advisable to proceed with the same, and, if so whether a syndicate is needed to furnish any part of the cash requirements. The annexed plan, it is believed, provides the cash needed for the payment and discharge of claims in priority to the present bonds, the making of betterments and the purchase of motive power urgently needed and the provision of working capital and an adequate cash reserve.

PLAN OF REORGANIZATION

Proposed New Capitalization Following Foreclosure

1. <i>Preferred Stock</i> , entitled in a priority to the common stock, to receive cumulative preferential dividends at the rate of 6% per annum, but no further dividends, and also to payment in full at par and dividends in case of liquidation or dissolution. Also redeemable on notice at par and dividends. Total available for the purposes of the reorganization, including \$1,906,400 to bondholders making payment under the plan.....	\$1,910,000
2. <i>Common Stock</i> , total available for purposes of reorganization.....	9,600,000
For distribution to bondholders without payment.....	\$ 953,200
To bondholders making payment under plans.....	8,578,800
For reorganization purposes or treasury of new company	68,000

\$1,906,400 OF ESTIMATED CASH REQUIREMENTS

Taxes, rentals and other claims requiring settlement in reorganization, immediate betterments and improvements and cost of additional motive power, etc.	\$1,089,384
Compensation to Reorganization Committee.....	20,000
Reorganization expenses, including legal and miscellaneous expenses, organization, franchises, and other taxes.....	150,000
Working capital, syndicate commissions, reserves, contingencies and miscellaneous	647,016

To meet these cash requirements holders of certificates of deposit for First Mortgage bonds will be permitted to make payment of \$200 as to each \$1,000 of their bonds, (\$100 on or before April 18, 1917 and \$100 May 18, 1917), and receive in addition to the 10% new common stock offered in exchange for all deposited First Mortgage bonds, 20% in new preferred and 90% in new common stock.

Table of Distribution

	<i>Cash Payment</i>		<i>New Preferred Stock</i>		<i>New Common Stock</i>
\$9,532,000 First Mortgage Bonds \$	1,906,400	20%	1,906,400	10%	\$ 953,200
Also if paying 20% in cash.....				90%	8,578,800
Total	<u>\$1,906,400</u>		<u>\$1,906,400</u>		<u>\$9,532,000</u>

As the foreclosure decree expressly reserves for future determination the right of First Mortgage bonds, Numbers 8947 to 9469, both inclusive, to share in the proceeds of the sale thereby ordered, the reorganization committee reserves the right, in its discretion, to permit the deposit under the plan of First Mortgage bonds bearing any of such serial numbers only upon such conditions as it may impose. The committee may also adjust other indebtedness.

Reorganization Committee

James N. Wallace, Chairman
Harry Bronner
James N. Jarvie
W. de Lancey Kountze
B. Aymar Sands
Clark Williams
C. E. Sigler, Secretary"

* * * * *

Commenting on the submitted plan, Receiver George Vallery made the following statement:

"The statements contained in the plan as to the estimated cash requirements are accurate, and the cash to be provided under the plan is sufficient for the purposes thereof. I approve the plan and recommend its acceptance by the holders of the First Mortgage bonds.

"The plan is in effect the payment of indebtedness prior to the bonds, and, if consummated, will result in giving to the bondholders, who are its real owners, the control of the property. I believe the prospects for the future are good, and that with the owners in control and the fixed interest charges eliminated as per plan, the property under normal conditions and with competent management will make a much better showing than is possible under any receivership.

"The gross earnings for the calendar year 1916 were \$1,666,813. When the improvements are made for which cash is provided under the plan, thereby permitting the use of heavy power over the entire line, the operating expenses will be materially reduced. In my opinion, the gross operating expenses should not exceed 75 per cent of the gross earnings, which, without figuring any increase in gross earnings, leave net earnings of about \$257,824 per annum after deducting taxes and rental of tracks and other income charges, or more than twice the amount necessary for the payment of full 6 per cent dividends upon the new preferred stock (\$1,910,000) soon to be issued."

However, about a month later, the Bondholders' Committee reported that the amount of bonds deposited, and the payments received under the plan of reorganization had not been sufficient to enable the committee to carry it into effect, and the plan was abandoned.

Following this, as has already been stated, the road went into the hands of A. E. Carlton before anything could be done by its old interests. The sale was confirmed by Judge Lewis in the Federal District Court at Denver, on May 11, 1917.

After its sale to Mr. Carlton, the property was reorganized and incorporated on May 31, 1917, under the name of the Colorado Midland Railroad Company, as successor to the Colorado Midland Railway Company. The authorized capital stock was ten million dollars. The entirely new official organization with Spencer Penrose as Chairman of the Board, was comprised of A. E. Carlton, as President; Charles M.

MacNeill and W. R. Freeman as First and Second Vice-presidents, respectively; Leslie G. Carlton (brother of the President) as Secretary, and H. L. Hobbs, of Denver, as Treasurer. M. L. Phelps was Superintendent, and J. J. Cogan was General Manager, with headquarters at Colorado Springs.

Concerning the matter, the Denver "News" had the following to say:

"The reorganized Colorado Midland Railroad Company has placed an order with the Colorado Fuel & Iron Company for \$350,000 worth of 90-pound steel rails to build forty miles of track, in pursuance of the programme for rebuilding and providing for new extensions. An order has also been placed for 100,000 oak ties and 100 steel-underframe freight cars.

"An expenditure of one million dollars within twelve months in improvements is the programme of the new owners. Included in the improvements contemplated, already outlined, is the building of an eight-mile link connecting the Uintah Railroad, at Mack, Colorado, with the Grand River Valley Railroad at Fruita. The Uintah line taps asphaltum and gilsonite deposits in the Book Cliff mountains, near Dragon, Utah, now delivering its tonnage to the Rio Grande at March.

"There will be no change in the location of the general offices and shops."

Fate, however, seemed to be against the old Colorado Midland, which had by this time come under the direction of the United States Railroad Administration, due to the country's being involved in the World War. During the first week of July, 1918, District Judge J. W. Sheafor, of Colorado Springs, appointed President A. E. Carlton receiver for the Colorado Midland Railroad Company's property, and ordered him to stop the operation of the road on or about August 5, after giving due notice to the public. At this time, it was shown that the road was being operated at a loss of \$1,500 a day, and it was then decided to dismantle and junk the entire line, with the exception of that part between Colorado Springs and Divide, a distance of about twenty-eight miles. This short section, it will be remembered, was that part of the Colorado Midland over which the Midland Terminal road had trackage rights.

Concerning the contemplated abandonment of the Midland, the Denver "News" had the following to say in its issues of July 3 and July 4, 1918:

"The rails and other materials which will be obtained from the junking of the Colorado Midland Railroad will be turned over to the Government and sent to France for the construction of military roads, it has been announced. The discontinuance and junking of the road from Divide to Grand Junction, about 270 miles, will furnish enough rails and other materials to command a price at this time which is greater than the entire road brought at the auction sale last year. The Midland was purchased last Fall by A. E. Carlton and his associates for \$1,425,000.

"Tentative plans of the chief owners, A. E. Carlton, C. M. MacNeill and Spencer Penrose, it is understood, call for the relinquishment of the right of way to the State Highway Commission for the construction of an automobile highway. This will give Colorado a direct highway across the Continental Divide.

"The matter of continuing operations from Colorado Springs via Divide into Cripple Creek has been placed before the Public Utilities Commission, but the action will be superseded by the fact that the Midland has already received a relinquishment from Director-general McAdoo.

"Junking of the Colorado Midland Railroad between Divide and New Castle, as proposed for August 5 probably will not be authorized by the Commission prior to a hearing in the matter. Through the notification received July 3, the Commission has thirty days in which to receive protests from towns or citizens against the proposed junking of the road.

"The decision to junk the road was reached when it was shown that operations were being carried on at a loss of \$1,500 a day.

"A. E. Carlton, Receiver of the Midland, was directed by Judge J. W. Sheafor to cease operations and put the property up for auction at the best price it would bring. In making the decision, Judge Sheafor said that the move was for the conservation of power and equipment, as ordered by the Federal Railroad Board, and inasmuch as the Board had diverted much of the business upon which the road was dependent to other lines, the earning power of the Midland had been destroyed . . ."

On the fourth day of August, 1918, train service on the Colorado Midland was discontinued for all time between Divide and Grand Junction. The rails, however, were not torn up. The cessation of train service at this time marked the beginning of the end of what proved to be during its life one of the most interesting and colorful of the railroads of the West.

Issues leading up to the discontinuance of service and the proposed dismantling of the road were presented to the Supreme Court on September 17, 1918 by counsel representing the owners, the receiver, the shippers and the Colorado Title & Trust Company. The Colorado Public Utilities Commission, and the Attorney-general's office were also represented.

The result of this session was the over-ruling of the District Court's order to abandon the road, and concerning it the Denver "News" carried the following story:

"The argument was directed to an application for supersedeas, making permanent a temporary stay order until the case could be heard in detail. The stay went into detail effect on August 5, after the service had been discontinued, and had the effect of preventing the dismantling until all the issues were determined. All interested parties agreed by stipulation to let the argument go toward the final conclusion in the case. The Court ordered the stipulation filed, and proceeded with the matter as originally docketed. It is the opinion of counsel, however, that the court may decide to consider all the phases, and write an opinion early in October.

"C. C. Dorsey, of Hughes & Dorsey, representing A. E. Carlton and the owners of the road, told how, when the United States Railroad Administration was created, the Midland, along with other roads, went into government control.

"Later the question of compensation came up. The owners believed that \$300,000 yearly rental was fair and equitable, but the McAdoo Administration would not give more than \$100,000. He said the Railroad Administration not only refused to pay compensation for the six months that the Colorado Midland was supposed to be under Federal control, but refused also to shoulder the operating losses.

"Only 15% of the railroad's business is local, the balance being trancontinental service shipments. To put the railroad on a paying basis, it is estimated that the local freight rates would have to be increased 500%. Much of this local business is open to competition.

"I. B. Melville, counsel for the shippers, declared that the jurisdiction lies with the State Public Utilities Commission. C. C. Hamlin, of Colorado Springs, represented the Midland bondholders."

More than a year slipped past, marked by continued attempts on the part of interested parties, including the United States Government, to save the road from oblivion. Meetings were held and suggestions were received and carefully considered, yet all to no avail.

Early in October, 1920, it was reported that the Atchison, Topeka & Santa Fe Railway was negotiating for the purchase of the Midland at a price mentioned to be in the neighborhood of four million dollars, with the view of making it a feeder for its system. Although much of the rolling stock and locomotives had been sold, and the track unused for months, was in poor condition, the "Sante Fe" examiners reported favorably after an inspection of the road. Notice was taken of the fact that the shops and terminals were still in good condition, and that some five hundred of the Midland's freight cars were still scattered over the country and were bringing in upwards of a dollar a day per unit, so that the purchaser, if the property were bought, would be getting equipment at much less than the repairment cost.

This deal, however, did not go through, and the plan to junk the road was again resorted to. As stated before, the Midland Terminal Railway, which was still operating on a rental basis over a part of the Colorado Midland, purchased from the latter road in December of 1921, the 26.90 miles of road from Colorado Springs to Divide. Shortly after this, the 200-odd main-line mileage of tracks of the Colorado Midland were removed from the roadbed, and the well-known "Pike's Peak Route", as a railroad, passed into history. Early in the following year, 1922, the Colorado Midland Railroad Company, as organized by Mr. Carlton back in 1917, was dissolved. All debts were discharged, and the stockholders received subscriptions in full in cash, and there were sufficient funds in the Company's treasury to pay a substantial dividend.

Although the railroad itself passed out of the picture for all time, some of the old equipment still remains. During the last days of the Midland's existence about all of the rolling stock was sold. Some of it went to lumber companies in the northwest, and some found its way

to other parts of this country. Other units were purchased by sugar companies for use on the Cuban plantations, and still more of them, the Baldwin "Consolidations", numbered in the 300 series, were sold to Mexican rail interests for service on the "Ferrocarriles de Nacionales de Mexico", operating in that country.

Three of the Midland's older "Consolidation", or "2-8-0" type engines, built by Baldwin and numbered in the "50" series, are at present in daily service on the Midland Terminal Railway, running between Colorado Springs and Cripple Creek.

It is also believed, but not certain, that the Baldwin "Consolidations" originally built as compounds and numbered in the 200 series, were sold to the St. Louis Electric Terminal Railway, one of the leased lines of the Illinois Terminal Railway System.

Old No. 14, one of the early lots of 10-wheelers, built by the Schenectady Locomotive Works, was still in existence as late as February 1932. It was discovered standing on a dead-storage track in the yards of the Longview, Portland & Northern Railway Company, at Longview, Washington. As will be seen by the accompanying photograph, the engine had been re-lettered and re-numbered, and bore the Longview, Portland & Northern's number 670. The original builder's plate was still in place, however, and the serial number 2418 was plainly visible. This number was recently checked against some authentic Midland records and proved the engine's identity beyond a doubt. The No. 41, also a 10-wheeler, built by Schenectady in 1889, went to the Frost-Johnson Lumber Company.

About the same time that the former No. 14 was discovered in Longview, three other Colorado Midland engines, and parts of a fourth engine were found in the junk yard of the Union Steel Company's plant at Portland, Oregon. Three of these engines, the No. 64, the No. 67 and the No. 70 were photographed by their discoverer, Mr. Ronald V. Nixon, of Willow Creek, Montana.

The No. 64, a "2-8-0", built by the Schenectady Works, under Serial Number 2228, was inside the shop, and appeared as if it were being reconditioned for future service. The original Colorado Midland lettering and numbering had been painted out, and at the time of photographing, no new ones had been added.

The other two, No. 67 and No. 70, were standing just outside the shop, and were due to be scrapped. Apparently some other road or company had used both of them since they left the Midland's tracks, for they both had been re-numbered, the former bearing number 1, and the latter number 4. They were both "2-8-0" types and were also built by the Schenectady Works. The No. 63 was already scrapped, and the boiler, cab, headlight and tank laid in different parts of the yard.

The No. 64, No. 67 and No. 70 were originally the No. 4, No. 7 and No. 10, since the numbers of the first ten Colorado Midland engines were changed during the last year of operation. This change was made to avoid confusion, as the engines of the Colorado Midland, Midland Ter-

minal and Colorado Springs & Cripple Creek District roads were put into pooled service, and as the numbers of the engines of the latter road started with No. 1, there was, of course, a chance of a misunderstanding.

Still another engine of the old Midland was discovered far removed from its original haunts. This was the "0-6-0" six-wheel, slope-tank switcher, No. 100, built by the Schenectady Works. This engine was found by one of our members, Mr. Walter A. Lucas, in the junk yard of the General Equipment Company, at Paterson, New Jersey. Mr. Lucas photographed the locomotive. The engine was one of three of this type which were used in yard service at different times at Colorado City, Leadville, Basalt and Aspen. It had been overhauled by the Midland during the last months of the road's existence, and it is believed that it was the first of the locomotives to be sold by the road. It was shipped as running freight to New Jersey in 1918, in the care of a Midland engineer, Mr. Robert C. Brockie, now of Cheyenne, Wyoming, who accompanied the engine throughout the entire trip.

As late as September 1933 the tender of locomotive No. 303, one of the Midland's later Baldwin-built "consolidations", was still resting at the base of a cliff in Hell Gate, where it had landed after falling nearly a thousand feet following an accident. It was observed at this time by an acquaintance of the writer, Mr. A. M. Cuthbert, of Cheyenne, Wyoming, while he was on a motor trip through this section.

Aside from these specific instances just mentioned, no further proof of the present-day existence of any more of the old Colorado Midland power has come to light. Those who are especially interested in the motive power of the road from its beginning to its end are referred to a complete roster which will be found elsewhere in this article. This roster was furnished through the kindness of Mr. A. M. Cuthbert, and his father, Mr. D. A. Cuthbert, who held the position of Road Foreman of Equipment (Travelling Engineer) on the Midland at the time of the road's demise.

In addition to that part of the equipment which is still in evidence, one more feature of the railroad still remains; that is the roadbed which now forms the present highway. This highway, coinciding for the most part with the exact roadbed of the old Midland, was opened in July 1924. Thus the scenic wonders and beauty through which the railroad formerly passed are still to be viewed by the travelling public. A detailed account of the project, as appeared in the "New York Times", under the date of May 25, 1924, is presented herewith:

"One of the most remarkable motor highways in America, both from a scenic and engineering view point, is nearing completion in Colorado, over the Rocky Mountains, and its opening for motor traffic is announced for July 1. A particularly interesting feature of this new Western thoroughfare is that it is constructed for its length of 221 miles over the old roadbed of the Colorado Midland Railroad, which ran from Colorado Springs to Glenwood Springs. In August, 1918, the railroad ceased to exist, and soon after its 200-odd mileage of tracks was removed. This roadbed, traversing a mountainous and picturesque country, with a two-

mile tunnel, bored through solid rock, at an altitude of 11,000 feet, with its steel bridges and 16-degree curves, has, within the last two years, been transferred into an automobile highway, and is a part of the Pike's Peak Ocean-to-Ocean Highway.

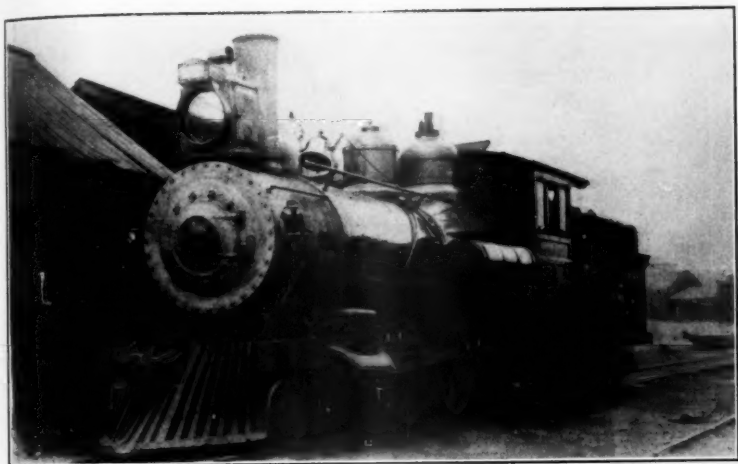
"The road, which has been built over the route of the abandoned railroad, is known as the Colorado Midland Highway. Leaving Colorado Springs, with Pike's Peak looming majestically in the west, the road goes through Manitou, up Ute Pass on a 30-mile decomposed granite-and-gravel road, 22 feet wide, not exceeding a 3 per cent grade, through scenery of unequalled grandeur. Then on through an eleven-mile canyon, and the grass and cattle country of South Park, over a well-surfaced dirt-and-gravel road. Thence to Buena Vista, within sight of the snow-capped mountains "Yale," "Harvard," and "Princeton."

"Leadville, with its mines, next greets the tourist as he climbs up to more than 10,000 feet over no grade to exceed 6 per cent. For 40 years, climbing these grades, with two, and often three, locomotives, millions of tons of coal have been consumed, depositing cinders on the roadbed of the old grade, until they mixed with decomposed granite, have furnished a roadbed which, after removing the ties, and plowing below them, and grading out, has made a roadbed second to none of its kind. It has none of the disadvantages of a new road, for it is settled and hard.

"The mountain slopes have sloughed off until there is no danger of rock falling or rock or mud slides and the drainage is perfect. Pure mountain water is found everywhere on each side of the Continental Divide. Both the Arkansas River and the Frying Pan River are stocked yearly with mountain trout from State and Government hatcheries, so that now these streams furnish some of the finest fishing in the State, containing Lochlaven, brook, native and rainbow trout. Company places are in evidence every foot of the way, with plenty of wood and water. Game hunters will find deer, bear, mountain-lion, coyotes, lynx, bobcats, elk and mountain sheep close by in the mountains.

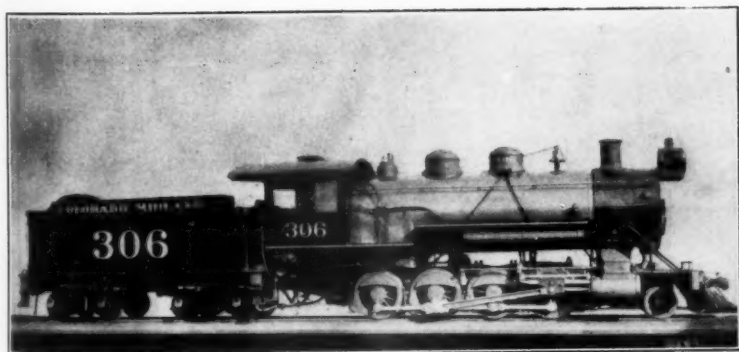
"All the way from Leadville to Glenwood Springs the road goes through one of the grandest mountain sections in the world. At Busk, the two-mile tunnel is entered. It is 16 feet wide and 22 feet high. The grade from east to west is 1.4 per cent, and, upon entering, a speck of light shows in the distance. It is the other opening of the tunnel, as the two-mile cut is made without the slightest curve. Emerging at the western portal, the scene widens out, forming a big amphitheatre, revealing Ivanhoe Lake, covering one hundred acres, and stocked with mountain trout.

"Down again on a 3 per cent grade, Mount Nast rises 14,000 feet. Then comes Hell Gate, a decline of 3,000 feet, where the roadbed is blasted out of solid granite. The Colorado Midland Railroad, when in existence, spent thousands of dollars advertising its scenery and the "Seven Castles". Hell Gate is about half a mile long, protected on one side by granite walls reaching up 2,000 feet, and on the chasm side by artificial rock walls ripped to a safe height. Hell Gate to Nast is eleven miles by road, but by foot, down a comfortable trail, the distance is only three-quarters of a mile.



Courtesy Messrs. A. M. & D. A. Cuthbert

COLORADO MIDLAND #48. Schenectady 1890.
At Leadville, Colo.—1901.



Courtesy Baldwin Locomotive Works

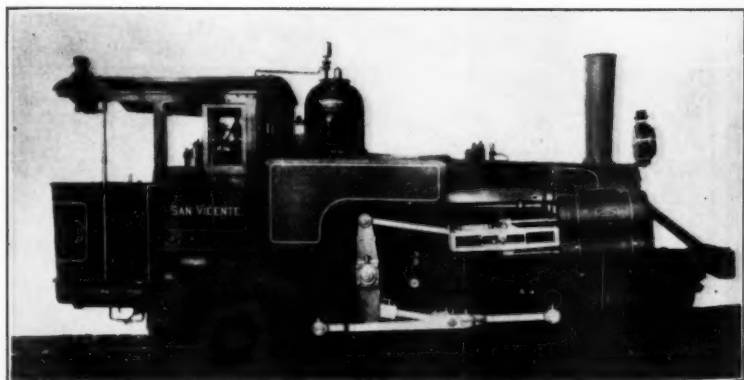
COLORADO MIDLAND #306. Baldwin 1907.



COLORADO MIDLAND #14. Schenectady—1887.

Courtesy R. V. Nixon

Shown here as #670 on the Longview, Portland & North. Photo taken at Longview, Wash., Feb. 1932.



Courtesy Baldwin Locomotive Works

MANITOU & PIKE'S PEAK "SAN VICENTE". Baldwin Compound 2-6-2 Rack-rail
The M. & P. P. Connected with the C. M. at Manitou, Colo.

"In descending the eleven miles, a small tunnel 600 feet long and numerous switchbacks are used so as not to produce a grade in excess of 3 per cent. Summer resorts are encountered every three or four miles the entire distance, and Wood's Lake is reached by a side road from Thomasville. The "Seven Castles" are then reached, each towering from 3,000 to 4,000 feet above the landscape,—composed of red granite.

"Down to Basalt, where the country widens out, with high mountains on each side, the Frying Pan River empties into the Roaring Fork River, which, in turn, augments the volume of the Colorado River at Glenwood Springs. Twenty miles from Basalt the terminus of this lofty motor highway is reached at Glenwood Springs, famous for its medicinal waters, where the Ute Indians in the early days brought their sick and afflicted. . . . The Automobile Club of Southern California is making arrangements to place proper sign posts on the Colorado Midland Highway, as well as on other Colorado motor routes, during the summer. . . .

Thus comes to an end one of the most interesting railroad lines of the early West. Just as in pioneer times the steam railroad supplanted the stage coach, so in this case the motor car supplanted the railroad. Whereas formerly the traveller passing over this region was lulled to sleep by the rhythmic exhaust of a laboring locomotive, now he hears only the soft purr of an automobile.

The thanks of the writer are due to the following persons for their kind and generous assistance in this work:

Messrs. A. M. and D. A. Cuthbert, for Motive-power and Rolling-stock Roster, photographs, and general information.

Mr. Robert C. Brockie, for general information.

Mr. Thomas A. Grigg, for general information.

Mr. William B. Thom, for general information.

Mr. Walter A. Lucas, for photographs.

Mr. Thomas T. Taber, for photographs.

Mr. Otto C. Perry, for photographs.

The Baldwin Locomotive Works, for photographs.

— ROSTER OF —
"COLORADO MIDLAND" MOTIVE POWER AND ROLLING STOCK
(Courtesy of Messrs. A. M. and D. A. Cuthbert.)

CLASS 91				0-6-0	CLASS 104				4-6-0
Engine No.	Builder	Builders No.	Built		Engine No.	Builder	Builders No.	Built	
100	Schenectady	2309	1887		14	Schenectady	2418	1887	
101	Schenectady	2310	1887		15	Schenectady	2239	1887	
102	Schenectady	2311	1887		16	Schenectady	2240	1887	
Weight:					17	Schenectady	2241	1887	
Engine 91000 lbs.					18	Schenectady	2242	1887	
Tender 55000 lbs.					19	Schenectady	2243	1887	
Working Pressure 150 lbs.					20	Schenectady	2244	1887	
Drivers 52" Cylinders 18"x24"					21	Schenectady	2245	1887	
					22	Schenectady	2246	1887	
CLASS 93				4-6-0	Weight:				
23	Schenectady	2436	1887		Engine 128000 lbs.				
24	Schenectady	2437	1887		Tender 110000 lbs.				
25	Schenectady	2438	1887		Working Pressure 160 lbs.				
Weight:					Drivers 60" Cylinders 19"x26"				
Engine 117000 lbs.					CLASS 115				2-8-0
Tender 110000 lbs.					1	Schenectady	2225	1886	
Working Pressure 160 lbs.					2	Schenectady	2226	1886	
Drivers 60" Cylinders 17"x26"					3	Schenectady	2227	1886	
CLASS 102				4-6-0	4	Schenectady	2228	1887	
11	Schenectady	2235	1887		5	Schenectady	2229	1887	
12	Schenectady	2236	1887		6	Schenectady	2230	1887	
13	Schenectady	2417	1887		7	Schenectady	2231	1887	
26	Schenectady	2419	1888		8	Schenectady	2232	1887	
27	Schenectady	2420	1888		9	Schenectady	2233	1887	
28	Schenectady	2421	1888		10	Schenectady	2234	1887	
29	Baldwin	9206	1888		Weight:				
30	Baldwin	9209	1888		Engine 132000 lbs.				
31	Baldwin	9208	1888		Tender 110000 lbs.				
32	Baldwin	9210	1888		Working Pressure 160 lbs.				
33	Baldwin	9215	1888		Drivers 52" Cylinders: 1 to 3 20"x24"				
34	Baldwin	9217	1888		4 to 10 20"x26"				
36	Baldwin	9298	1888		CLASS 136				2-8-0
37	Baldwin	9300	1888		49	Baldwin	15130	1897	
38	Baldwin	9302	1888		50	Baldwin	15131	1897	
39	Schenectady	2925	1889		51	Baldwin	15132	1897	
40	Schenectady	2926	1889		52	Baldwin	15133	1897	
41	Schenectady	2927	1889		53	Baldwin	15134	1897	
42	Schenectady	2928	1889		Weight:				
43	Schenectady	2929	1889		Engine 154000 lbs.				
44	Schenectady	2930	1889		Tender 110000 lbs.				
45	Schenectady	3261	1890		Working Pressure 180 lbs.				
46	Schenectady	3262	1890		Drivers 52" Cylinders 21"x26"				
47	Schenectady	3263	1890		CLASS 159				2-8-0
48	Schenectady	3264	1890		201	Baldwin	18631	1901	
Weight:					202	Baldwin	18632	1901	
Engine 125000 lbs.					203	Baldwin	18646	1901	
Tender 110000 lbs.					204	Baldwin	18647	1901	
Working Pressure 160 lbs.					205	Baldwin	18648	1901	
Drivers 52" Cylinders: 29 to 38 19"x24"									
Others 19"x26"									
Engine 35 destroyed by explosion Aug. 15 1896, at Basalt, never rebuilt.									

CLASS 159	(Continued)	2-8-0	CLASS 175	2-8-0
Weight:			Engine	Builders
Engine 182000 lbs.			No. Builder	No. Built
Tender 127000 lbs.			301 Baldwin	32124 1907
Working Pressure 200 lbs.			302 Baldwin	32125 1907
Drivers 60" Cylinders (see below)			303 Baldwin	32126 1907
			304 Baldwin	32127 1907
			305 Baldwin	32151 1907
			306 Baldwin	32152 1907
Engines when purchased were com-			Weight:	
pounds, 17" and 28"x30" cylinders,			Engine 193000 lbs. Tender 142000 lbs.	
Stephenson valve gear. Converted to			Working Pressure 200 lbs.	
single expansion engines, 21"x30" cylin-			Drivers 52" Cylinders 22"x28"	
ders and Walschaert valve gear in 1908.				
Engines numbered from 14 to 22 were generally assigned to Passenger Service.				
Engines numbered from 1 to 13 were generally assigned to Freight Service.				
Engines numbered from 26 to 53 were generally assigned to Freight Service.				
Engines numbered in 200 Series were generally assigned to Helper Service.				
Engines numbered in 300 Series were generally assigned to Double Heading and				
Pusher Service.				
Engines numbered in 100 Series were assigned to Yard Service.				
SNOW PLOWS				
SNOW PLOW "ROTARY A"				
Build by Leslie Bros. Mfg. Company 1888.				
Wheel Diameter 9 feet. Weight not given.				
SNOW PLOW "ROTARY B"				
Build by American Locomotive Company 1900.				
Wheel Diameter 11 feet. Weight 133500 lbs.				
CAR FLANGERS				
No. 06 Youngstown Car Company 1888.				
07 Youngstown Car Company 1888.				
STEAM SHOVELS				
03 Bucyrus Company 1887.				
05 Bucyrus Company 1887.				
05 Converted to derrick.				
PILE DRIVER				
04 Vulcan Iron Works 1887.				
Hammer 6000 lbs.				
RAIL LOADER				
08 United Supply Mfg. Co. 1904.				
GAS TRANSPORT CAR				
7001 CMRy 1908.				
BLOCK CARS				
09 CMRy 1902.				
010 CMRy 1903.				
011 CMRy 1902.				
WRECKING OUTFIT CARS				
014, 015, 016, 018.				
B & B OUTFIT CAR				
01 Barney and Smith 1887.				
SIDE DUMP BALLAST CARS				
0552 to 0561 CMRy 1902 24000 lbs. Length 33' 10"				
0551 CMRy 1909 Same.				
0562 to 0571 CMRy 1909 Same.				
CINDER CARS				
502, 512, 529, 531, 532, 542, 544, 546, 547, 550. Terre Haute Car Company 1886.				
Weight 19500 lbs. Length 34'.				

FLAT CARS

501 to 550	Terre Haute Car Co.	1886	20000 lbs.	34'
700 to 749	St. Charles Car Co.	1890	20500 lbs.	34'
600	CMRy	1909		35'

HOPPER CARS

3000 to 3018	St. Charles Car Co.	1889	26500 lbs.	30'
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GONDOLA CARS

1507 to 2165	St. Charles Car Co.	1887	22700 lbs.	34'
7008 to 7107	Amer. Car & Fdy Co.	1901	30200 lbs.	36' 10"
7108 to 7207	West. St. Car & Fdy	1907	31500 lbs.	36' 4"
8001	CMRy	1908	36400 lbs.	38' 6"

STOCK CARS

4001 to 4025	St. Charles Car Co.	1887	26200 lbs.	34'
4201 to 4300	Pullman Company	1900	32300 lbs.	37' 6"

REFRIGERATOR CARS

1201 to 1220	Pullman Company	1897	39000 lbs.	36'
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BOX CARS

5001 to 5325	Barney and Smith	1887	26200 lbs.	34'
5326 to 5525	St. Charles Car Co.	1889	26200 lbs.	34'
5526 to 5709	Pullman Company	1897	31000 lbs.	34' 6"
5901 to 6000	Amer. Car and Fdy	1901	30200 lbs.	34' 7"

CABOOSE

401 to 424	St. Charles Car Co.		30000 lbs.	34' 2"
425 to 429	CMRy			

DINERS

"Idlewild"	Originally chair car No. 247, Built by CMRy	1907.	96000 lbs.	60'
"Ivanhoe"	Originally chair car No. 250, Built by CMRy	1907.	106300 lbs.	60'
248	CMRy 1906	95300 lbs.	60'	
249	CMRy 1906	95300 lbs.	60'	

CHAIR CARS AND COACHES

246	Pullman	1901	95300 lbs.	60'
108	Pullman	1887	55500 lbs.	48'
109	Pullman	1887	55500 lbs.	48'
110	Pullman	1887	55500 lbs.	48'
112	Pullman	1887	55500 lbs.	48'
251 to 254	Pullman	1887	57300 lbs.	48'
255	Pullman	1887	57300 lbs.	48'
101 to 104	Pullman	1887	55500 lbs.	48'
106 to 107	Pullman	1887	55500 lbs.	48'
111	Pullman	1887	55500 lbs.	48'
(111 changed to observation chair car in 1905)				

COMBINATION CARS

9	Pullman	1887	60600 lbs.	48'
8 & 10	Pullman	1887	47575 lbs.	50'
11 & 12	Pullman	1887	55700 lbs.	48'
257,258,259	Pullman	1887	60600 lbs.	48'

BAGGAGE MAIL AND EXPRESS

314 to 316	Barney and Smith	1890	53500 lbs.	50'
301	Pullman	1887	53500 lbs.	50'
303 to 306	Pullman	1887	53500 lbs.	50'
308 to 311	Pullman	1887	53500 lbs.	50'
313	Pullman	1900	80200 lbs.	60' 2"

SUBURBAN CARS

1 to 6	CMRy	1901	28900 lbs.	40'
(Originally Gondolas 1501 to 1506)				

OFFICIALS PRIVATE CARS

99	Barney and Smith	1888	78250 lbs.	54' 10"
100	Pullman	—	110900 lbs.	62' 6"

PRINCIPAL STATIONS ON THE COLORADO MIDLAND

<i>Distance From Colorado Springs</i>	<i>Station Name</i>	<i>Altitude Above Sea Level 6000 Ft.</i>
0.0	Colo. Springs	
	1.20%	
3.0	Colorado City	6092
	3.00%	
6.1	Manitou	6442
	4.00%	
11.5	Cascade	7421
	3.00%	
20.0	Woodland Park	8494
	3.00%	
26.9	Divide	9198
	3.00%	
35.8	Florissant	8193
	1.64%	
40.3	Lake George	7978
	2.15%	
57.7	Spinney	8652
	0.95%	
68.9	Hartsel	8892
	1.11%	
77.3	Haver	8994
	2.00%	
84.7	Bath	9516
	1.65%	
103.2	Wild Horse	8081
	1.42%	
112.1	Barre	8596
	1.65%	
118.2	Granite	8951
	1.42%	
127.0	Snowden	9305
	1.65%	
133.5	Arkansas Junction	9695
	3.24%	
141.7	Busk	10805
	2.76%	
143.7	Ivanhoe	10994
	3.01%	
153.7	Sellar	9619
	3.00%	
165.2	Thomasville	7985
	3.00%	
170.4	Ruedi	7585
	3.00%	
185.3	Basalt	6614
	1.25%	
196.7	Carbondale	6142
	1.25%	
205.6	Cardiff	5940
	1.15%	
209.0	Glennwood Springs	5793
	1.25%	
221.1	New Castle	5574
	1.00%	
227.8	Silt	5441
	1.00%	
230.9	Antlers	5432
	1.00%	

<i>Colorado Springs Distance From</i>	<i>Name Station</i>	<i>Above Sea Level Altitude</i>
235.0	Rifle	5310
	1.00%	
239.8	Lacy	5239
	1.00%	
243.7	Morris	5209
	1.00%	
252.4	Grand Valley	5104
	1.00%	
257.1	Una	5025
	1.00%	
265.0	De Beque	4945
	1.00%	
271.9	Akin	4849
	0.60%	
276.1	Tunnel	4819
	0.70%	
281.0	Cameo	4774
	0.70%	
285.6	Palisade	4739
	0.60%	
291.1	Clifton	4713
	0.80%	
297.9	Grand Junction	4583

BRANCH LINES

133.5	Arkansas Junction	9695
	3.00%	
137.3	Leadville	10190
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185.3	Basalt	6614
	2.00%	
197.0	Rathbone	7516
	2.00%	
203.7	Aspen	7950
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205.6	Cardiff	5940
	4.00%	
213.9	Sunlight	7834
	3.00%	
220.7	Spring Gulch	8305

Total Mileage:—

Colorado Springs to Grand Junction	297.9
Arkansas Junction to Leadville	3.8
Basalt to Aspen	18.4
Cardiff to Spring Gulch	15.1

Total Mileage (Main Lines).....335.2

Spurs, sidings, yards etc. not included in total.

Figures between station names indicate the maximum grade existing between those stations.

The above information taken from Engineering Department blue-prints, and is furnished through the kindness of Messrs. A. M. and D. A. Cuthbert.

W. O. Moody

Again that One who knoweth neither time nor circumstances has deemed it best to summon to His Home one of our Directors and valued workers. On Christmas Day of 1934, W. O. Moody passed away.

Mr. Moody was born in Chicago, Illinois on January 12th, 1868. Upon graduation from the Chicago Manual Training School, he became stationary engineer for the St. Francis Lumber Company in Arkansas. At the time of the World's Columbian Exposition in Chicago in 1893 he was with the Root Porative Pressure Blower Company. Between the years 1890 and 1894 he was a machinist in the Weldon Shops of the Illinois Central R. R. In the latter year he was made draftsman for the Fairbanks, Morse & Company and from 1895-1896 he was head engine designer for the Gates Iron Works, Chicago. In May, 1896, he was appointed chief draftsman for the Illinois Central R. R. and in May, 1906, he was made mechanical engineer for the system, which position he held at the time of his death. Mr. Moody was married and is survived by his widow and two sons.

At the time this Society was formed in 1921, Mr. Moody was one of several men living in the Middle West who was interested in the historical development of the railroad and the locomotive. He was elected a Director of this Society in 1922 and has served our interests continuously up to the time of his death. Although his work called for an intimate knowledge of the modern locomotive, he was none the less interested in the little 4-4-0's which have done so much to make railroad history. To those of us who were privileged to know him, we have lost a friend and the Society has lost a loyal supporter. At the meeting of the Nominating Committee held the first of this year, out of respect to Mr. Moody, it was voted not to fill his vacancy on the Board of Directors until sufficient time had elapsed to pay tribute to his memory and in this action our Directors concurred.

RESOLUTION ADOPTED AT THE ANNUAL MEETING OF THE RAILWAY AND
LOCOMOTIVE HISTORICAL SOCIETY, AT BOSTON, MASSACHUSETTS,
JANUARY 13, 1935.

WHEREAS: God, in His infinite wisdom has deemed it best within the past twelvemonth to remove our friend, associate and former Director, W. O. Moody; a man beloved by us all, a man whose sincerity and ceaseless energy was an inspiration and example to each of us, whose constant helpfulness was at all times of greatest aid:

THEREFORE, BE IT RESOLVED:

That the Society spread upon its minutes, this record of its overwhelming loss and transmit a copy of this Resolution to Mr. Moody's widow and the Illinois Central Railroad Company, in addition to publishing it in our next BULLETIN sent to its membership.

BE IT SO ORDERED.

In Memory of
E. M. CARTER
Central Street
West Brookfield, Massachusetts
who died on May 18, 1934.

In Memory of
W. O. MOODY
Director of
The Railway and Locomotive Historical Society
47 North Spring Avenue
La Grange, Illinois
who died on December 25, 1934.

